

# Melrose High School

Program of Studies  
2008-2009

*Academics, Arts, & Technology  
for the 21st Century*

---

---

# Melrose High School

360 Lynn Fells Parkway  
Melrose, Massachusetts  
02176

---

## Administration

781-979-2200

**Mr. Joseph P. Dillon**  
*Principal*

**Marianne Farrell**  
*Assistant Principal*

**Robert Savarino**  
*Assistant Principal*

## Guidance

781-979-2208

**John Buxton**  
*Guidance Chair*

**Jeffrey Bolduc**  
*Counselor*

**Francesca LoGrasso**  
*Counselor*

**Joseph Parrillo**  
*Counselor*

**Jennifer Shackelford**  
*Counselor*

## Chairpersons

**James Babineau**  
*Math Chair*

**Stella Cocchiara**  
*Foreign Language Chair*

**Susan Eason**  
*Science, Business and  
Technology, Chair*

**Robert Coughlin**  
*Social Studies Chair*

**Patricia Ruggiero**  
*Director of Physical Education  
Health & Athletics*

**Joseph Messina**  
*Fine Arts Director*

**Jeffrey Trubisz**  
*English Chair*

---

# WE ARE MELROSE

---

---

# 2008-2009 Program of Studies

---

---

## Dear Students and Parents:

The Program of Studies of Melrose High School is designed to produce the best education opportunities possible for all our students. Toward this end, the curriculum and the co-curricula program are subject to on-going review and revision to meet the ever-changing needs of the student body and the community at large. The Program of Studies of Melrose High School is designed to produce the best educational opportunities possible for all our students.

This booklet has been prepared to assist you and your parents in planning a course of studies appropriate to your needs and interests. You are urged to consult with the professional staff for further clarification of course objectives.

The Guidance Department, Department Chairs and teachers will advise you about course sequence and other matters pertinent to your individual goals. Your careful study of minimum requirements and course prerequisites, followed by consultation with Guidance and Department Chairs prior to your enrolling in courses, cannot be overemphasized. When you indicate your course selection for next year, they should be firm. The choice of subjects is an important decision and should not be taken lightly. **As such, once you have made your decisions, those selections are your commitment for the school year 2008-2009.**

Best wishes for every success in the program you elect.

Sincerely,

Joseph P. Dillon  
Principal

## Table of Contents

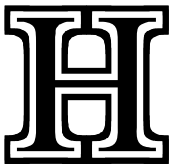
<b>Program</b>	<b>Page</b>		
Mission Statement.....	4	Science.....30	
Course Selection.....	5	Fine and Performing Arts.....34	
Developmental Guidance Services.....	7	Business and Technology.....37	
English .....	12	Comprehensive Health.....40	
Mathematics.....	16	Community Learning.....43	
Social Studies.....	19	Special Education .....	44
Foreign Language.....	23		



## **Melrose High School Mission Statement**

The Mission of Melrose High School is:

- A. To provide every student with the opportunities to acquire knowledge, values and skills
- B. To encourage each student to contribute actively to society.
- C. To foster critical thinking, communication skills and creative expression.



The cornerstones for achieving this mission are a positive attitude toward lifelong learning, shared decision-making, community partnership, and continuous innovation.

### **ACADEMIC EXPECTATIONS:**

- 1. Acquire, analyze and apply knowledge using multiple learning strategies.
- 2. Communicate clearly and effectively.
- 3. Successfully meet the demands of standardized testing.
- 4. Critically assess oneself.
- 5. Understand and appreciate cultural diversity.



## **Melrose Public Schools**

### **Vision**

Each child in the Melrose Public Schools is given the opportunity to achieve greatness and educational excellence through the dedicated efforts of inspired educators, involved families, and a supportive community.

### **Mission**

We inspire, engage, challenge and support all students to achieve academic excellence, to become life-long learners, and to be successful participants in our global community.

---

---

# Course Selection

---

Melrose High School strives to encourage every student to achieve success as measured by his/her individual needs, abilities, and desires. Since there are few requirements that apply to all students, students and parents are invited to make their interests and needs known to us prior to the final scheduling of classes. It is the responsibility of students and parents to plan all selections carefully. Students, with approval of parents, are eligible to elect any subject in the Program of Studies as long as stated prerequisites are met and provided the course fits the grade level of the student. You may not receive credit for the same course twice.

Subject offerings are broad enough so that, with careful selection, students may prepare for entrance to four-year colleges, two-year colleges, nursing programs, technical schools, business schools, or any number of careers or career training programs.

In addition to the required subjects listed below under "Graduation Requirements", other subject choices each year should reflect the educational plans, record of tests, grades achieved by each student, and recommendations of school personnel. Requirements for different types of post-secondary education vary too much to list minimum requirements accurately for all students. Students and parents must assume the responsibility for finding out these requirements with the help of counselors, teachers, advisors, directors, and other school personnel.

## Graduation Requirements

In order to participate in graduation, students must meet all graduation requirements listed below. Since students are required to carry a credit load of 7 credits for each of their four years in High School, students could acquire a total of 28 credits in that time.

**Community Service is required of all students for graduation. Twelve hours (12Hrs.) is required for each year a student is in attendance at Melrose High School.**

<u>Area</u>	<u>Credits</u>
English	4.0
Mathematics	3.0
Science	3.0
Social Studies	3.0
Including US History	
Fine/Applied Arts	2.0
(Art, Music, Theatre Arts Business & Technology, Family & Consumer Science	
Foreign Languages	1.0
Wellness (PE & Health)	2.0
Electives	6.0
Total	24.0

All students will be required to pass MCAS tests in order to receive a diploma. Course selection should reflect the necessary preparation for those exams.

**Administrative waivers may be granted at the discretion of the building principal.**



### **Grading & Midyear/Final Exams**

Grades are issued four times in the school year. In all full year courses, the final year's average will be the average of the two semesters. Semester averages are a combination of the two quarter grades and the grade received for either the midyear or final exam given in that semester.

Midyear and final exams are given in all courses. These exams each count 10% of the respective semester grade. The average of the first and second quarter grades will count 90% in determining the first semester average. Similarly, the second semester average will include the average of third and fourth quarter grades at 90% and the final exam at 10%. The average for the entire year will be the average of both semesters.

### **Senior Internship Program**

This program provides eligible seniors an exciting and rewarding opportunity to experience education outside of the classroom. Each day of the 4<sup>th</sup> quarter participating students will work with co-operating mentors at an approved business or organization in the Boston area. The goal of the program is to have students gain valuable educational, work and life experiences not available in the classroom setting.

Eligibility to participate in the program is based on the following requirements:

- B average for their Senior year in each subject area
- Completion of all senior year requirements
- Teacher approval
- Parent – guardian approval
- 95% attendance rate

Acceptance to this program is at the discretion of the Administration.

### **Summer School Policy**

Summer school is required of all students who fail any full year academic course. All makeup of courses must be completed through the Melrose Summer School. Students will not be allowed to double up on courses during the regular school year. Upon written request, exceptions to this rule may be granted by the building Principal.

---

---

# Developmental Guidance Services

---

---

## ***Mission:***

**The Melrose High School Guidance Department is dedicated to fostering the development of our students as individuals and as members of a democratic society. Our goal is to thoroughly assist students, through careful academic planning, the development of school and community connections, in-depth exploration of college and career opportunities, and promotion of both social awareness and civic responsibility.**

## **Services:**

- Academic planning and guidance around course sequence
- College and career exploration
- Monitoring of academic progress
- Modification of schedules
- Scheduling and orientation for new students
- Personal and emotional counseling
- Crisis intervention counseling
- Referrals to community resources
- Consultation with parents, teachers and students

In the guidance department, we view our role as student advocates as one that is both important and significant. It is our responsibility to help students increase their knowledge about post-high school opportunities, and to help them make the important connection between their high school record and the specific options that will be available to them, as a result of their overall record, upon graduation from high school. It is our responsibility to work to challenge our students accordingly by guiding them to take courses that appropriately challenge them and from which they will expand their base of knowledge. We strongly encourage all of our students to become involved in extracurricular activities, through which they can make important connections and grow in ways that extend beyond the classroom.

We work to make the Melrose High School Guidance Department a welcoming place where students can easily access information and work closely with us as their counselors. We continue to build a developmental guidance program that is dedicated to a process of self-exploration and assessment of both interests and aptitudes. We do our best to guide students accordingly through the process of course selection and individual programming.

Please refer to the guidance link at [www.melroseschools.com/mhs](http://www.melroseschools.com/mhs) for a complete guide to the services that we provide.

## **Appointments:**

The guidance office is open from 7:30 a.m. to 4:00 p.m. daily. Students are encouraged to make appointments ahead of time. Parents are encouraged to call, send an email, or schedule an appointment ahead of time if they want to speak with their child's counselor in person. The main number for the Guidance Office is 781-979-2208. Counselors are also available at the Fall Open House, as well as at each Parent / Teacher Night.

## **Counselor Assignments:**

Students are assigned alphabetically to counselors at the beginning of their freshman year. Every effort is made to ensure that this arrangement remains consistent throughout each of their four years; at times, however, due to various extenuating circumstances, this is not possible. Therefore, specific counselor assignments are not guaranteed for four years.

## **College Planning and Preparation:**

In terms of course selection, each student is encouraged to plan a course of study that is both challenging and rigorous. Counselors encourage students to take strong academic courses whenever possible. As a general guideline for college preparation in academic courses, we recommend the following:

**English** – 4 years (mandatory)

**Mathematics** – 4 years (Algebra II, Geometry, Pre-Calculus, Calculus **or** Applied Finite Math if possible)

**Social Studies** – 3-4 years (United States History II is mandatory)

**Science** – 3-4 years (including at least two lab courses, 3 if possible: Biology, Chemistry, Physics, Environmental Science, Anatomy / Physiology)

**Foreign Language** – 3-4 years

*Students with strong interest and aptitude in language may consider adding an additional language beginning in sophomore or junior year; all students with the aptitude for language are encouraged to follow the entire sequence of their chosen language.*

### **Additional Considerations:**

- All students are encouraged to take computer courses to enhance their knowledge and understanding of technology. This is particularly important for students who plan to pursue majors that heavily emphasize computer knowledge. *For example, students who plan to major in architecture or graphic design might want to seriously consider the course sequence in Computer Aided Design / Animation.*
- Students who plan to major in *Biology, Pre-Medicine* or *Nursing* should be certain to complete the following courses: *Algebra I and II, Anatomy / Physiology, Biology and Chemistry (the “ABC’s”).* Students who are serious about the nursing field should strive for above average grades in each of these courses.
- Students who are planning to major in a *mathematics and / or engineering-related field* should take upper-level math and science courses such as: *Pre-Calculus, Calculus, Chemistry and Physics.* Students may want to discuss AP options with their teachers and counselor.
- Students who are planning to major in an area of *Humanities* should consider taking elective courses such as *Psychology, Anthropology / Sociology, Journalism, Creative Writing, as well as several other electives offered in the English and Social Studies departments.*
- Students who plan to major in the *arts* or in *architecture*, in addition to taking advanced level courses in their particular area of interest (*Advanced Standing Art II and III, Photograph I and II, Computer Aided Design / Animation, etc*), should consider that a portfolio will likely be required for college admission. Portfolios require careful planning, management of time, and the collection and organization of approximately 15 pieces of work. In similar fashion, students who plan to major in *music* or *theater* should consider that an audition is a likely requirement as part of the college admission process.

**All students should take the initiative to meet with their counselor to discuss their individual interests, aptitude and plan for course sequence. It is never too early for a high school student to begin this process.**

**Helpful Links:**

It is never too soon for a high school student to begin to familiarize him or herself with the college application process. The input of parents is very important in this process. We suggest the following web links as good places to start:

[www.collegeboard.com](http://www.collegeboard.com)

[www.act.org](http://www.act.org)

[www.massmentor.edu](http://www.massmentor.edu)

[www.fafsa.ed.gov](http://www.fafsa.ed.gov)

[www.profileonline.collegeboard.com](http://www.profileonline.collegeboard.com)

[www.mefa.org](http://www.mefa.org)

[www.petersons.com](http://www.petersons.com)

**Rank-in-Class and Grade Point Average**

As a vast majority of colleges and universities use rank-in-class as a criterion for acceptance (prefer weighted), MHS uses a weighted rank in class. Rank-in-class is determined using final grades in the five major disciplines (English, Math, Science, Social Studies, and Foreign Language). All courses in those disciplines assigned a designation AP, Honors, CP1 and CP2 will be used in class rank calculations. Students must carry 4 full credit weighted courses each year to be ranked. Grades from all four years are used to calculate grade point average (GPA) and rank-in-class.

<b>Grades &amp; Weights</b>					
<u>Letter Grade</u>	<u>Numerical Equivalent</u>	<u>Advanced Placement</u>	<u>Honors</u>	<u>College Prep 1</u>	<u>College Prep 2</u>
A+	100-97	5.33	4.83	4.33	4.08
A	96-93	5.00	4.50	4.00	3.75
A-	92-90	4.67	4.17	3.67	3.42
B+	89-87	4.34	3.84	3.34	3.09
B	86-83	4.00	3.50	3.00	2.75
B-	82-80	3.67	3.17	2.67	2.42
C+	79-77	3.34	2.84	2.34	2.09
C	76-73	3.00	2.50	2.00	1.75
C-	72-70	2.67	2.17	1.67	1.42
D+	69-67	2.34	1.84	1.34	1.09
D	66-63	2.00	1.50	1.00	.75
D-	62-60	1.67	1.17	.67	.42
F	< 60				

**Admissions Standards for the Massachusetts State Colleges and Universities:**

For freshmen applicants, the admissions standards for state colleges and universities have two main parts: the completion of 16 required academic courses and a minimum grade point average earned in college preparatory classes completed at the time of the student’s application. It is important to know that no applicant with a high school GPA below 2.00 may be admitted to a Massachusetts state college or university. For more important information on these requirements, please visit the Massachusetts Board of Higher Education website at [www.mass.edu](http://www.mass.edu). The following sliding scales highlight the requirements:

**For Freshmen Applicants to UMASS:**

<b>Weighted HS GPA:</b>	<b>Combined SAT Critical Reading / Math Must Equal or Exceed:</b>	<b>Composite ACT Score Must Equal or Exceed:</b>
2.51-2.99	950	20
2.41-2.50	990	21
2.31-2.40	1030	22
2.21- 2.30	1070	23
2.11-2.20	1110	24
2.00-2.10	1150	25

**For Freshmen Applicants to a State College:**

<b>Weighted HS GPA:</b>	<b>Combined SAT Critical Reading / Math Must Equal or Exceed:</b>	<b>Composite ACT Score Must Equal or Exceed:</b>
2.51 – 2.99	920	19
2.41 – 2.50	960	20
2.31 -- 2.40	1000	21
2.21- 2.30	1040	22
2.11 – 2.20	1080	23
2.00 - 2.10	1120	24

*Massachusetts Comprehensive Assessment System*

The Massachusetts Comprehensive Assessment System (MCAS) was implemented in response to the Education Reform Law of 1993, which required that MCAS be designed to measure performance based on the learning standards in the Massachusetts Curriculum Frameworks. MCAS serves as a basis of accountability for students, schools and districts ([www.mcas@doe.mass.edu](http://www.mcas@doe.mass.edu)).

**Graduation Requirements by Grade:**

- Class of 2009.....English Language Arts  
Mathematics
- Beginning with the Class of 2010.....English Language Arts  
Mathematics  
Science and Technology/Engineering
- Beginning with the Class of 2012..... English Language Arts  
Mathematics  
Science and Technology/Engineering  
History and Social Science

Please visit the Massachusetts Department of Education website at [www.mcas@doe.mass.edu](http://www.mcas@doe.mass.edu) for more important information about the MCAS testing schedule, question types, scoring methods the appeal process and test preparation. You may also contact your child's guidance counselor for additional information.

---

---

## Melrose High School

# COURSE LEVEL DESCRIPTIONS

---

---

**Note: Students can move levels within a content area based on their progress, teacher recommendation, and interest.**

**Advanced Placement:** This nationally based program, structured by the College Board, is a cooperative effort on the part of high schools and colleges. Advanced Placement courses are available in some content areas. These classes provide students with an opportunity to take college-level courses while enrolled in high school. The College Board's standardized exams are administered at the high school in May. Students who receive a qualifying score and whose chosen college participates with AP may receive college credit and/or advanced standing at their college.

### **Honors Level**

These courses are available to the student who has demonstrated superior mastery of prerequisite skills and concepts in a specific content area. Ideally, the student will enroll because of a genuine intellectual curiosity for the subject studied. The content of the course and its pace are rigorous. The student grasps abstract concepts, readily accepts challenging material, and builds upon prior knowledge by connecting new learning with previously studied topics within the content area of study and across disciplines. Students must be focused, self-directed, and independently able to handle multiple assignments simultaneously and prioritize and manage their time to meet deadlines consistently.

### **CP I (College Preparatory)**

These courses are available to the student who has demonstrated average to above average mastery and performs at or above grade-level in the skills needed for that specific content area. As the teacher presents new concepts, the student is able to independently apply the concepts taught. Pacing of new material is appropriate so that students have time to practice new skills and build on previously learned material. The student can plan and follow through on daily assignments and long-range projects.

### **CP II (College Preparatory)**

These courses are available to the student who may need additional support to perform at grade-level in the academic area. This support may include organizational and study skills as needed. While the student may have difficulty applying concepts and may need additional time to connect ideas, the course is paced to provide students with the core content and basic concepts included in that course at any of the above levels.

January, 2008

### **Guidance Department:**

Mr. John Buxton (Director)	781-979-2279	<a href="mailto:jbuxton@melrose.mec.edu">jbuxton@melrose.mec.edu</a>
Mr. Joseph Parrillo	781-979-2211	<a href="mailto:jparrillo@melrose.mec.edu">jparrillo@melrose.mec.edu</a>
Ms. Francesca LoGrasso	781-979-2212	<a href="mailto:flograsso@melrose.mec.edu">flograsso@melrose.mec.edu</a>
Ms. Jennifer Shackelford	781-979-2207	<a href="mailto:jshackelford@melrose.mec.edu">jshackelford@melrose.mec.edu</a>
Mr. Jeffrey Bolduc	781-979-2213	<a href="mailto:jbolduc@melrose.mec.edu">jbolduc@melrose.mec.edu</a>
Mrs. Connie O'Connor (Secretary)	781-979-2208	<a href="mailto:coconnor@melrose.mec.edu">coconnor@melrose.mec.edu</a>
Mrs. Patricia Talbot (Records Clerk)	781-979-2210	<a href="mailto:ptalbot@melrose.mec.edu">ptalbot@melrose.mec.edu</a>
Dr. Mary Elizabeth Ford (School Psychologist)	781-979-2214	<a href="mailto:mford@melrose.mec.edu">mford@melrose.mec.edu</a>

---

---

## English

---

---

The English curriculum is based on the communication skills of reading, writing, speaking, viewing, listening, and presenting. Specifically, the curriculum provides instruction in the different modes of written and oral expression, analytical reading, vocabulary, grammar/usage, and media study. There is a strong departmental philosophy that views writing as an important thinking and discovery skill and is therefore incorporated into all required English courses and electives to provide a rich variety of writing experiences. Furthermore, the curriculum provides for an equally meaningful experience with great literature of the past and present.

All students must take English throughout their four years of high school, accumulating a total of four credits in order to graduate. Consequently, nearly all courses have open admission so students may select courses that suit their needs, abilities, and achievement. A student in any honors level class will have his or her status reviewed each quarter to ensure ongoing progress and proper placement. Enrollment in Advanced Placement English culminates in the taking of the AP Examination in May.

As four full credits of English are necessary for graduation, all failed non-elective English courses must be made up. Students will not be allowed to take two non-elective (i.e. required) English classes within the same school year.

Homework assignments are designed to reinforce ideas presented in the prior class(es); to provide practice of vocabulary, usage, and composition skills; and to provide time for reflective thinking (e.g., synthesis of reading done for class, planning/writing essays). The time expectations for homework assignments vary according to the level of instruction, the specific assignment, and teacher involved.

All of the Language Arts department course offerings reflect the five Academic Expectations adopted by Melrose High School. However, those expectations that are stressed are enumerated.

There will be a \$12.00 fee per year for the purchase of workbooks.

### **Senior Paper Requirement**

To gain final credit, a senior must successfully complete and receive a passing grade on a Senior Research Paper under the direction of his or her Senior English teacher. Failure to earn a passing grade on the Senior Research Paper results in the failure of the course, mandatory enrollment in summer school and jeopardizes graduation. Also, it would necessitate the enrollment of the student in a special Summer School course. Although no credit is given, the senior thesis is worth 40 hours of time and learning.

## Summer Reading Requirement

Reading during the summer months is an accepted and important part of our English Program. Each English course requires specific reading to prepare the student for course content and goals. Each English teacher assigns one or more novels, short stories, or plays in June and follows up with an assessment in September.

## Writing Portfolio

The English Department collects at least three pieces of writing of varying modes each year from each student. Also, added to the folder stored in the English Office is an annual reflection based on three questions. Seniors may access this folder for papers needed for college application needs.

### 115 English 1 H 1 Credit Grade 9

This course may include a wide experience in literature, intensive vocabulary study, oral presentations, a strong emphasis on composition, and a complex study of grammar and syntax. Course content includes Hamilton's Mythology, poetry, Julius Caesar, The Pearl, Lord of the Flies, Animal Farm, The House on Mango Street, and selections from the Prentice-Hall anthology and studying word/language problems related to both the MCAS and SAT Exams. **Prerequisite:** *Teacher recommendation, "A-" average in both 8th-grade English and MCAS Prep, reading level at least two years above grade level, fluent writing sample, and department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 3

### 121 English 1 CP1 1 Credit Grade 9

This course will emphasize essential areas of study -- grammar (usage and punctuation), composition, oral presentation, vocabulary, and literature. Course content will include reading mythology, Julius Caesar, Lord of the Flies, Animal House and The House on Mango Street, and selections from the Prentice-Hall anthology, studying word/language problems related to both the MCAS and SAT Exams. Targeted Student Expectations (See Pg.4): 1, 2, 3

### 116 English 2 H 1 Credit Grade 10

This course emphasizes preparation for the MCAS exam through emphasis on building skills in critical thinking, reading comprehension and the writing process. Literary works include The Catcher in the Rye, A Separate Peace, Our Town, To Kill a Mockingbird, Night, and Merchant of Venice or Romeo & Juliet. PSAT, SAT and MCAS related literature is used in the writing exercises and literature analysis as a preparation for standardized exams. **Prerequisite:** *"B-" average or better in English 115 or A- average in English 121.* Targeted Student Expectations (See Pg.4): 1, 2, 3

### 122 English 2 CP1 1 Credit Grade 10

This course emphasizes preparation for the MCAS exam through emphasis on building skills in critical thinking, reading comprehension and the writing process. Literary works may include The Catcher in the Rye, A Separate Peace, Our Town, To Kill a Mockingbird and Early Autumn and Merchant of Venice or Romeo & Juliet. Grammar exercises, PSAT, SAT and MCAS related literature is used in the writing exercises and literature analysis as a preparation for standardized exams. **Prerequisite:** *English I.* Targeted Student Expectations (See Pg.4): 1, 2, 3

### 103 Advanced Placement English 3 AP 1 Credit Grade 11

This course emphasizes the skilled reading of prose, especially non-fiction, written in a variety of periods, disciplines, and rhetorical contexts. Students will become more adept writers who can compose for a variety of purposes and audiences. This course is directed towards students who desire advanced placement in college and requires students to take the Advanced Placement English Language and Composition Examination in the spring. **Prerequisite:** *A in English 116, successful writing samples, completion of a summer assignment and departmental approval.* Targeted Student Expectations (See Pg.4): 1, 2, 3

- 117 English 3** **H** **1 Credit** **Grade 11**  
 This course concentrates on the writing of structured expository and persuasive papers, on critical readings of essays, poems, speeches, short stories and novels from American literature, and on learning test taking strategies for standardized exams. The Elements of Style is used as reference in the writing exercises as students are asked to role play as writers. Literature that will be read includes Macbeth, The Scarlet Letter, The Crucible, The Adventures of Huckleberry Finn, Of Mice and Men, A Farewell To Arms, The Great Gatsby. PSAT and SAT exercises will be used as preparations for standardized exams. **Prerequisite:** "B-" average or better in English 116 or "A" average in English 122. Targeted Student Expectations (See Pg.4): 1, 2,
- 123 English 3** **CP1** **1 Credit** **Grade 11**  
 This course concentrates on the writing of structured expository and persuasive papers, on critical readings of essays, poems, speeches, short stories and novels from American literature, and on learning test taking strategies for standardized exams. The Elements of Style is used as reference in the writing exercises as students are asked to role play as writers. Literature that will be read includes Macbeth, The Crucible, The Adventures of Huckleberry Finn, A Farewell To Arms, The Great Gatsby, Of Mice and Men. PSAT and SAT exercises will be used as preparation for standardized exams. **Prerequisite:** *English II*. Targeted Student Expectations (See Pg.4): 1, 2, 3
- 104 Advanced Placement English 4** **AP** **1 Credit** **Grade 12**  
 This course emphasizes critical and analytical thinking, both of which will be exhibited through writing and thoughtful class discussion of literature. The course is directed towards students who desire advanced placement in college and requires the students to take the Advanced Placement English Literature and Composition Examination in the spring. **Prerequisite:** "A" in English 117, B+ in English 103, successful writing sample, and department approval. Targeted Student Expectations (See Pg.4): 2, 3, 4
- 118 English 4** **H** **1 Credit** **Grade 12**  
 This course emphasizes critical reading skills and applies proper principles of grammar and usage from The Elements of Style. Students read and analyze works including Hamlet, Oedipus, Death of a Salesman, Pride and Prejudice, Ethan Frome, and Brave New World, 1984; and study word and language problems related to the SAT. This course also includes the writing of a formal research paper. **Prerequisite:** "B-" average or better in English 117 or A average in English 123. Targeted Student Expectations (See Pg.4): 2, 3, 4
- 124 English 4** **CP1** **1 Credit** **Grade 12**  
 This course will include the refinement of critical reading skills through analysis of works including Brave New World, 1984, Oedipus, Ethan Frome, One Flew Over the Cuckoo's Nest, Death of a Salesman, and Hamlet. Students will review and apply proper grammar and usage from The Elements of Style and study word and language problems related to the SAT exam. This course also includes the completion of a formal research paper. **Prerequisite:** *Completion of English III*. Targeted Student Expectations (See Pg.4): 2, 3, 4
- 139 Creative Writing** **CP1** **1 Credit** **Grade 9- 12**  
 This course is designed to meet the needs of those students who desire to write in any number of expressive modes. The course content will include developing a creative voice in addition to studying short readings by a wide range of authors. The structure of the course will provide support and direction in creative writing, as well as an introduction to the workshop and editing process. Students will be required to submit writing for considerations and possible publication in the school's literary magazine, The Thistle. Targeted Students Expectations (See Pg.4): 2, 4, 5
- 142 English MCAS Prep** **CP** **½ Credit** **Grade 10**  
 This course is offered to students as a complement to their 10<sup>th</sup> grade English course. In this course students will continue working on reading and writing skills as they relate to the MCAS exam and the curriculum frameworks. Any student who failed the grade 8 English portion of the MCAS is required to take this course while those students who received needs improvement are strongly recommended that they select this course. Targeted Student Expectations (See Pg.4): 2, 3, 4

- 143 Writer’s Workshop** **PD** **½ Credit** **Grade 9, 10, 11, 12**  
 In this grade 9-12 mixed class, half-year elective, students will focus on improving their writing and communication skills. Students will receive assistance and support in completing assignments in their work for English, social studies, science and math classes. Students will also complete a variety of assignments in paragraph structure and writing longer manuscripts. They will write descriptions, narratives, and persuasive pieces. Classroom reading will include excerpts about the writing process as well as writing models from professionals and other student writers. Students should expect to write each day, and class members will also be expected to keep a writer’s journal. Targeted Student Expectations (See Pg.4): 2, 4, 5
- 148 Media Literacy / Speech** **CP1** **1 Credit** **Grade 10, 11, 12**  
 A necessary skill for the student of today is the ability to critically review media. In this course students will analyze the various forms and facets of media and how it impacts individuals and society. Students will also view media as a reflection of our culture and determine the accuracy of that representation. Targeted Student Expectations (See Pg.4): 2, 4, 5
- 149 SAT Prep** **CP** **½ Credit** **Grade 11, 12**  
 This course is designed to prepare juniors and seniors for the English portion of the SAT and ACT test required for college admission. Test taking strategies will be the emphasized in this course. Targeted Student Expectations (See Pg.4): 2, 3, 4
- 152 Introduction to Journalism** **CP1** **1 Credit** **Grade 10, 11, 12**  
 Students will be introduced to the skills for this specific type of writing and will take part in school and community publications. This course is designed for both students who have little or no knowledge in journalism, as well as those who have interest and experience in journalistic media. *Prerequisite: Recommendation of the Journalism teacher and approval of application.* Targeted Student Expectations (See Pg.4): 2, 4, 5
- 155 Expository Writing** **CP1** **½ Credit** **Grade 11, 12**  
 This course covers the four modes of writing and analyzes the characteristics of each. In addition to studying description, narration, argumentation, exposition, students will compile a journal, will learn and practice writing skills in small and large groups, and will practice writing in all four modes of discourse. Writing instruction will emphasize rhetoric and style, also college essays. Targeted Student Expectations (See Pg.4): 2, 4, 5
- 156 Advanced Journalism** **H** **1 Credit** **Grade 11, 12**  
 This course is designed for students who have completed Introduction to Journalism. Students will polish their skills for this specific type of writing and will take part in every aspect of the school publication from editing to layout, including learning *Adobe Pagemaker 7.0*. *Prerequisite: Introduction to Journalism 152.* Targeted Student Expectations (See Pg.4): 2, 4, 5
- 159 Theatre Arts** **CP1** **1 Credit** **Grade 9- 12**  
 This elective combines an introduction to elementary acting techniques with a study of theatre history and criticism. Curriculum goals would include specific understandings of the actor, the stage, and the audience. Oral and written assessment would complement the interpretation and performance of a theatrical production. Targeted Student Expectations (See Pg.4): 2, 4, 5
- 160 English as a Second Language** **PD** **1 Credit** **Grade 9,10,11,12**  
 For students who speak English as a second language this course must be taken in conjunction with a college prep English class. *Prerequisite: Recommendation of counselor.* Targeted Student Expectations (See Pg.4): 1, 2, 4
- 973 Yearbook** **CP** **1 Credit** **Grade 11, 12**  
 The yearbook captures the story of one school year in a responsible and creative way. This course will provide opportunities for staff members to learn and develop skills in writing, design, photography, organization, communication, management and leadership. Students in this class will comprise the editorial staff of the yearbook. Additionally, class members will be responsible for attending after school and evening meetings when necessary. *Prerequisite: Recommendation of the Yearbook teacher and approval of application.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

---

---

# Mathematics

---

---

Success in mathematics courses depends upon the mastery of skills and understanding of basic concepts. The overall emphasis of the Mathematics program is to provide not only levels of instruction designed to meet the needs of individual students but also to allow flexibility of movement within these levels as the student's mathematical proficiency changes. Three years of mathematics are required for graduation, and many colleges seek students with four years.

Homework is an essential element in all mathematics courses. It is expected that all students will spend sufficient time on the homework assignments to not only complete the homework but to gain the necessary practice, skills, and understanding of the material. The courses offered by the Mathematics department reflect a combination of the Melrose High School academic expectation numbers 1, 2, 3 and 4. However, those expectations that are stressed are enumerated.

The course offerings progress in the following format:

**Honors:** 215 (Grade 9), 216 (Grade 10), 217 (Grade 11), 214 (Grade 12) or 204 (Grade 12) or 205 (Grade 12)

**College Prep:** 228 (Grade 9), 222 (Grade 10), 229 (Grade 11), 224 (Grade 12)

**College Prep Concepts:** 226 (Grade 9), 236 (Grade 10), 246 (Grade 11), 234 (Grade 12)

**Electives:** 251, 252, 253, 255, 278, 276, 279

## 215 Algebra 2 H 1 Credit Grade 9

This course prepares students to study geometry and calculus in the honors program. The course of study includes functions, rational expressions, solutions of systems of equations, logarithms, variation, irrational numbers, progressions, exponents, factoring, conic sections, and problem solving. Emphasis is placed on student discovery, and demands are made upon the student's ability to learn by reading carefully worded explanations. A scientific calculator is required. **Prerequisite:** "B" or better in 8th grade Algebra I(Advanced) with teacher recommendation. Targeted Student Expectations (See Pg.4): 1, 3, 4

## 226 Concepts of Algebra 1 CP2 1 Credit Grade 9, 10, 11, 12

This course covers the basic algebraic principles essential for further study in mathematics. This course is contemporary with stress on both modern and traditional concepts. **Prerequisite:** Pre-Algebra CP. Targeted Student Expectations (See Pg.4): 1, 3, 4

## 216 Geometry H 1 Credit Grade 10

Accuracy in the statement and use of definitions, theorems, and postulates, and formal proofs is emphasized, with solid geometry integrated along with plane geometry. Major topics include: circles, area and volume, congruence and similarity, and coordinate geometry. **Prerequisite:** Algebra 2 H with department approval. Targeted Student Expectations (See Pg.4): 1, 3, 4

## 222 Geometry CP1 1 Credit Grade 10, 11, 12

This course stresses the power of deductive reasoning. Emphasis is placed on the study of a select list of theorems and their applications to original problems. Topics considered include similarity and congruence of geometric figures, parallel lines and their properties, the circle and its properties, areas of plane figures, the Pythagorean theorem, and the use of a compass and straight-edge in the construction of geometric figures. **Prerequisite:** "C" or better in Algebra I or Algebra II. Targeted Student Expectations (See Pg.4): 1, 3, 4

## 236 Concepts of Geometry CP2 1 Credit Grade 10, 11, 12

This course places more emphasis on problem solving and fundamental concepts than on formal proofs. Theorems from geometry are used to reach logical conclusions and to solve problems. The critical aspects of lines, planes, and geometric figures will be covered and emphasis will be placed on the analysis of simple geometric figures. The approach to a problem, rather than its solution, will be stressed. **Prerequisite:** Algebra I CP or Concepts of Algebra 2. Targeted Student Expectations (See Pg.4): 1, 3, 4

- 228 Algebra 2** **CP1** **1 Credit** **Grade 9**  
 This course covers the same materials as course number 223. The prerequisite for getting into this class is a “C” or better in 8<sup>th</sup> grade Algebra I (proficient). Targeted Student Expectations (See Pg.4): 1, 3, 4
- 246 Concepts of Algebra 2** **CP2** **1 Credit** **Grade 10, 11, 12**  
 This course begins with a review of Algebra I and continues with a detailed study of quadratic equations, graphs, problem solving, progressions, and the binomial theorem. *Prerequisite: Concepts of Algebra 1.* Targeted Student Expectations (See Pg.4): 1, 3, 4
- 217 Pre-Calculus** **H** **1 Credit** **Grade 11, 12**  
 This rigorous course deals with traditional pre-calculus topics. Stress is placed on infinite process, understanding functions and their graphs, and the composition of functions and their applications. Extensive work is done using polynomial, rational, exponential, logarithmic, and trigonometric functions. Other topics include limits, sequences and series and the binomial theorem, after a thorough review of trigonometry and its applications students will begin an intensive study of the fundamentals of Differential Calculus. A graphing Calculator is required. *Prerequisite: Geometry H with department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 3,
- 224 Pre-Calculus** **CP1** **1 Credit** **Grade 12**  
 This course covers such topics as trigonometry, analytic geometry, Allahs of curves, derivatives, limits and complex numbers. Emphasis is placed on graphing techniques as well as the application of basic mathematical formulas. Advanced algebraic concepts are stressed. *Prerequisite: "C" or better in Algebra 2 CP and Geometry CP or Math Analysis.* Targeted Student Expectations (See Pg.4): 1, 2, 3,
- 229 Math Analysis** **CP1** **1 Credit** **Grade 12**  
 This course is for students who took Algebra II (228) in their freshman year. This course will enhance the Algebra II topics covered in Course 228, as well as introduce complex numbers, conic sections and methods of solving quadratic equations. The course will begin new topics dealing with logarithms, graphing functions and some basic trigonometry. *Prerequisite: Algebra II (228)*
- 204 Advanced Placement Calculus AB** **AP** **1 Credit** **Grade 11, 12**  
 Designed for serious math and science students, this course covers the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics include review of functions and graphs, limits and continuity, the derivative and its applications, the definite integral, techniques and applications of integration, and the Fundamental Theorem of the Calculus. A graphing calculator is required. To receive credit for this course, the student must take the AP Exam in Calculus. *Prerequisite: "A" in Pre-Calculus H and recommendation of Department Coordinator. Strongly recommended AP Physics be taken concurrently.* Targeted Student Expectations (See Pg.4): 1, 2, 3,
- 205 Advanced Placement Calculus BC** **AP** **1 Credit** **Grade 12**  
 Designed for serious math and science students, this course covers the syllabus for the BC Advanced Placement Examination of the College Entrance Examination Board. Topics include all of these covered in the AB Calculus course. Additional topics covered in Calculus BC include advanced integration, parametric equations and functions, velocity and acceleration vectors for two-dimensional motion and the epsilon/delta definition of limits. A graphing calculator is required. To receive credit for this course, the student must take the AP Exam in Calculus. *Prerequisite: "A" in Pre-Calculus H and recommendation of the Department Coordinator. Strongly recommended AP Physics be taken concurrently.* Targeted Student Expectations (See Pg.4): 1, 2, 3,
- 214 Calculus** **H** **1 Credit** **Grade 12**  
 Standard topics from differential and integral calculus are included in this course. Topics covered include limits and continuity of functions, derivatives, definite integrals, exponential and logarithmic functions, trigonometric and inverse trigonometric functions, techniques of integration. Successful completion of this course will ensure the student of a strong background for the study of college-level mathematics. *Prerequisite: Pre-Calculus H with department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**234 Transition to College Math** **CP1** **1 Credit** **Grade 12**

This course reviews difficult concepts covered in previous Algebra and Geometry courses. Topics in trigonometry, complex numbers, advanced algebra and analytic geometry are included. Emphasis is placed on graphing techniques as well as the application of basic mathematical formulas. This course offers a good foundation for students planning further study in the social sciences, education, or other liberal arts disciplines. *Prerequisite: Algebra 2 and Geometry.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**264 Applied Finite Math** **CP1** **1 Credit** **Grade 12**

This course will include sets, real numbers, inequalities, straight line functions, operations on matrices, systems of equations, inverse matrices, the simplex method, counting permutations and combinations, sample spaces, and probability. Practical application problems will show students the concepts in a real-world context before introducing the mathematical theory. *Prerequisite: Pre-Calculus H or CP.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**255 Consumer Math** **CP2** **1 Credit** **Grade 11, 12**

Students learn to apply computing skills to solve problems in everyday personal finances. Units covered include banking, checking accounts, credit cards, budgeting, job related finances, taxes, housing installment buying, household bills, insurance, financing a car and investments and retirement. Targeted Student Expectations (See Pg.4): 1, 2, 4

**278 Math MCAS Prep** **CP** **1/2 Credit** **Grade 10**

**276 Math MCAS Prep** **CP** **1 Credit** **Grade 10**

This course is offered to students as a complement to their 10<sup>th</sup> grade math course. In this course students will continue the development of mathematical skills as they relate to the MCAS exam and the curriculum frameworks. Any student who failed the grade 8 math portion of the MCAS is required to take this course while those who received needs improvement are strongly recommended that they select this course. Targeted Student Expectations (See Pg.4): 1, 3, 4

**279 SAT Math Prep** **CP** **1/2 Credit** **Grade 11, 12**

This course is designed to prepare juniors and seniors for the math portion of the SAT and ACT test required for college admission. Test taking strategies will be emphasized in this course. Targeted Student Expectations (See Pg.4): 1, 3, 4

---

---

## Social Studies

---

---

The Social Studies curriculum is designed to help students develop knowledge, skills, and personal qualities through the study of history and the other social sciences. Our Social Studies courses are designed to complement the Massachusetts Common Core of Learning, which encourages independent thinking, inquiry, and the demonstration of personal, social, and civic responsibility. Our courses are also designed to meet the requirements of the History and Social Science Framework, which was approved by the State Department of Education in October, 2002.

Although most Social Studies courses offered to freshmen, sophomores, and juniors emphasize history, these courses also develop content knowledge in other areas of the social sciences. As required by the Social Studies Curriculum Framework, the study of the principles of geography, citizenship and government (commonly known as political science), and economics make up a major part of our history courses. Additionally, seniors are offered courses dealing with psychology, sociology, anthropology, government and law, and economics.

Social Studies courses at the college preparatory level are open to all students. Placement in an honors or advanced placement course requires that students meet stated prerequisites. These are listed for each appropriate course. During the school year it is expected that students in advanced placement courses will earn no less than a C in any quarter. Any grade less than C will result in a student being moved to a lower level.

All one-half credit courses in the Social Studies department are college preparatory and open to all students of the designated grade. One-half credit courses do not count toward the calculation of GPA and rank-in-class. This means that students taking advanced placement or honors courses can take any half-credit course without having it negatively impact their GPA or class rank. Half credit courses are offered to enrich a student's Social Studies experience and may not be used to replace a full credit course.

All Melrose High School students must successfully complete three full credit Social Studies courses, including U.S. History, in order to graduate. All courses offered by the Social Studies department reflect the Melrose High School academic expectations numbers: 1, 2, 3, 4 and 5. However, those expectations that are stressed are enumerated.

### 307 **World History II** **H** **1 Credit** **Grade 9**

This course covers the world history of civilization from the late 18<sup>th</sup> century to the present. Topics include the rise of the nation state in Europe, the French Revolution, Industrial Revolution, 19<sup>th</sup> century Political reform in Western Europe, imperialism in Africa, Asia, and South America, WWI, the Great Depression, WWII, the Cold War, the Russian and Chinese revolutions, as well as a look at the world at the beginning of the 21<sup>st</sup> Century. Emphasis will be placed on critical reading and writing, as well as the use of primary source documents. **Prerequisite:** "A-" in 8<sup>th</sup> grade history and successful completion on a departmental entrance exam. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5

### 322 **World History II** **CP** **1 Credit** **Grade 9**

This course covers the world history of civilization from the late 18<sup>th</sup> century to the present. It covers the same topics as World History II H but at a pace and depth more appropriate for the College Preparatory level of study. Targeted Student Expectations (See Pg.4): 1, 2, 5

### 312 **United States History I** **H** **1 Credit** **Grade 10**

This course examines the creation and growth of the United States from 1763 to the rise of the Gilded Age. Topics include the American Revolution, Constitution, Rise of Political Parties, Early National Period, Manifest Destiny, Reform Movement, Age of Jackson, the Civil War, and Reconstruction, the Old West, and the Gilded Age. The course will look to balance the growth of governmental power, with an examination of the rights and privileges of the average person. Emphasis will be placed on critical reading and writing, as well as the use of primary source documents. **Prerequisite:** "B" or better in World History II H or "A" in World History II CP and Departmental approval. Targeted Student Expectations (See Pg.4): 1, 2, 5

- 323 United States History I** **CP** **1 Credit** **Grade10**  
 This course examines the creation and growth of the United States from 1763-1877. The course covers the same topics as honors U.S. History, but at a pace and depth more appropriate for the College Preparatory level of study. Targeted Student Expectations (See Pg.4): 1, 2, 5
- 325 Introduction to the U.S. Government & Law** **CP** **½ Credit** **Grade 10**  
 Designed for those students who have a specific interest in the area of legal studies, this course spans the U.S. legal system with emphasis placed on the roles of local, state, and federal governments in developing and implementing our laws. Students will study documents such as the Bill of Rights, the other Amendments to the United States Constitution, laws of the Commonwealth of Massachusetts and ordinances of the City of Melrose. Within the area of law, students will explore criminal, civil, juvenile, family, and automobile law, and the various types and levels of courts at both the state and federal level. Targeted Student Expectations (See Pg.4): 1, 2, 4
- 305 Advanced Placement U.S. History** **AP** **1 Credit** **Grade 11**  
 This course provides students with analytic skills and factual knowledge necessary to deal critically with the study of U.S. history. It is designed to prepare students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year college courses. Students will learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship, developing the skills necessary to arrive at conclusions on the basis of an informed judgment, and to present reasons and evidence clearly and persuasively in essay format. Topics range from the Discovery of the New World to events in the 1990's. Students taking this course are required to take the College Board AP Exam in U.S. History. *Prerequisite:* "A" in U.S. History I H and department approval or "A+" in U.S. History I CP and department approval. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5
- 315 U.S. History II** **H** **1 Credit** **Grade 11**  
 This course examines the United States from Imperialism to its growth as a world power, to our role in the 21<sup>st</sup> Century. Topics include, Imperialism, the Progressive Era, World War I, the Great Depression, World War II, the Cold War, the Korean War, Life in the 50's and 60's, Vietnam, and America in the 1980's and 1990's, including terrorism and its impact on America. Emphasis will be placed on critical reading and writing, as well as the use of primary source documents.  
*Prerequisite:* "B" or better in U.S. History I H or "A" in U.S. History I CP and department approval. Targeted Student Expectations (See Pg.4): 1, 2, 5
- 316 U.S. History** **CP** **1 Credit** **Grade11**  
 Students will study American history from Imperialism to the present. This course covers the same topics as honors U.S. History, but at a pace and depth more appropriate for the College Preparatory level of study. Targeted Student Expectations (See Pg.4): 1, 2, 5
- 324 Multi-Cultural Studies** **CP** **½ Credit** **Grade 11**  
 Students enrolled in this course will study the variety of cultures that make up the United States today, as well as cultures throughout the world, past and present. Special focus will be placed on the nature of multiculturalism, overcoming ethnocentrism, and the study of prejudice and discrimination. Students in this course are encouraged to participate in Melrose High School's Multicultural Club. Targeted Student Expectations (See Pg.4): 1, 2, 5
- 383 State & Local History** **CP** **½ Credit** **Grade 11**  
 The history of Massachusetts and the City of Melrose will be studied, including a study of the state constitution as well as state and local government. Students will learn about the growth of Massachusetts from a rural farming and fishing state, to a region dominated by industrial and trading interests, and ultimately to the current importance of technology and finance. As part of this course, students will study landmarks in the City of Melrose and become familiar with the growth of their city since its founding in the 1600's. Targeted Student Expectations (See Pg.4): 1, 2, 5

**386 Sports in Society** **CP** **½Credit** **Grade 11**

This course will cover the history of sports in America, the influence of sports on our society, changes in sports over the past century, legal issues as they relate to sports, and principles of coaching that lead to success in sports as well as life in general. This course is recommended for students who participate in sports, or who may be considering one of the many careers that are a part of the modern sports industry. Targeted Student Expectations (See Pg.4): 1, 2, 4

**304 Advanced Placement Psychology** **AP** **1 Credit** **Grade 12**

This course is designed to provide students with analytic skills and factual knowledge to better understand the social science called psychology. The course prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year college courses. This course develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Students taking this course are required to take the College Board AP Exam in Psychology in the spring of their senior year. *Prerequisite:* “B” or better in AP U.S. History and Department Approval, “A” in U.S. History H and departmental approval, “A+” in U.S. History CP and department approval. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5

**314 Anthropology/Sociology** **H** **1 Credit** **Grade 12**

This course involves a study of the principles of anthropology and sociology and will help students to better understand the individual in relation to his or her culture. Students will focus on prehistoric human evolution in both the physical and cultural sense, Old World archaeology, and New World, pre-Columbian Native cultures. Students will also study contemporary American culture, its values, taboos, and other cultures in order to observe the variety of ways in which people structure their institutions. Using the principles of sociology, the students will have the opportunity to pursue in-depth analyses of certain social problems, such as violence, prejudice, and poverty. *Prerequisite:* “B” or better in US History “H and AP” or “A” in US History CP. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**334 Contemporary Legal Issues** **CP** **1 Credit** **Grade 12**

This course is designed for students who would enjoy a general introduction to legal issues. It will cover many of the same topics as the honors course, but at a pace and depth more appropriate to College Preparatory level. Targeted Student Expectations (See Pg.4): 1, 2, 5

**335 Contemporary Legal Issues** **H** **1 Credit** **Grade 12**

Information presented in this course is valuable to every citizen. Students will study the role the law and our judicial system play in one’s life. Topics include criminal and juvenile law, consumer law, the Constitution, family law, negligence, and individual rights and responsibilities. Through the use of case studies students will develop a better understanding of law. Students will use analytic reasoning skills in dealing with current problems in society and the methods by which the legal community tries to resolve these issues. Targeted Student Expectations (See Pg.4): 1, 2, 5

**343 Psychology** **H** **1 Credit** **Grade 12**

This course focuses both on the scientific basis of psychology and on its relevance to the student’s own life. Methods, theories, and current issues in psychology are presented. Students take part in demonstrations and experiments, and are introduced to the case study approach. Major units include perceptions, learning, motivation, personality, and problems in behavior adjustment. *Prerequisite:* “B” or better in US History “H and AP” or “A” in US History CP. Targeted Student Expectations (See Pg.4): 1, 2, 4

**344 Psychology** **CP** **1 Credit** **Grade 12**

This course is designed for students who would enjoy a general introduction to the study of psychology. It will cover many of the same topics as in Psychology H, but at a pace and depth more appropriate to the College Preparatory level. Targeted Student Expectations (See Pg.4): 1, 2, 4

**354 Economics**

**H 1 Credit**

**Grade 12**

The economic principles of supply and demand, the law of scarcity, growing international interdependence, and consumerism are the focus of this course. It will also focus on how businesses operate, financial planning, political economics, and our economic future Targeted Student Expectations (See Pg.4): 1, 2, 4

**374 Constitutional Law**

**CP ½ Credit**

**Grade 12**

This course is designed to provide students with an in depth understanding of the United States Constitution. Topics to be covered include judicial review, the Bill of Rights, separation of powers, due process, equal protection, freedom of expression, and individual rights. A case study approach, similar to that used in college and law schools, will be used to enhance critical thinking skills. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**387 History through Film**

**CP ½ Credit**

**Grade 12**

This course will involve the viewing and analysis of a number of films, or parts of films, that significantly represent events of history. Film can be a method for the study of history, and that is the goal of this course. Students will view films and participate in related research and study that will allow them to analyze and evaluate the historical accuracy, and in some cases the inaccuracy, portrayed in film. Participating in this course will afford students a unique opportunity to enriching their knowledge of history. This course is reserved for seniors who have successfully completed their 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade history requirements. Examples of the types of films that may be covered include Gettysburg, All Quiet on the Western Front, The Last Emperor, Citizen Kane, The Grapes of Wrath, Gandhi, Schindler’s List, and Malcolm X. Participation in this course will require parental approval, due to the “R” rating of some of these films. Targeted Student Expectations (See Pg.4): 1, 2, 4

---

---

## Foreign Language

---

---

The Foreign Language program offers five languages: French, German, Italian, Latin, and Spanish. It provides language learning for students with academic, vocational, and career needs and interests. The program contains levels of instruction so that a student may progress at a pace compatible with his/her language aptitude and motivation.

The involvement of the United States in a world economy has increased the need for foreign language competence. Many occupations in business, industry, public service, and government prefer people with knowledge in more than one language. Therefore, the focus of this program is to develop proficiency in oral communication, reading, writing, and cultural understanding in order to prepare students for more advanced language study and to emphasize the usefulness of language skills.

The curriculum of the Foreign Language Department is completely aligned with both the Massachusetts Frameworks and the National Standards in Foreign Languages. It also reflects the academic expectations established by Melrose High School. Students are required to do written and oral assignments prescribed by the teacher and to review each day the material presented in class. Though each individual has one's own pattern of learning behavior, the development of language skills requires disciplined learning, a positive attitude, and motivation to achieve proficiency. Instructional materials include print, videos, audio and software to complement each language program. The department also benefits from a newly installed multimedia laboratory and a vast selection of documentaries, culture videos and foreign language films.

A student must earn a grade of "C" or better in a course in order to proceed to the next year of study in any language. Students who received less than a "C" may either repeat or make up deficiencies in summer school to be able to pass a placement test in order to be admitted to the following year. All first year students begin the study of the language at the College Preparatory level. At the end of the I Quarter of Yr 1, if the student excels and shows superior interest, the teacher may, with the permission of the Department Head, give such student Honor's credit. Students who fail the first year of a language twice should consider starting a new language. Those students who pass a course with a C or better but who fail the final exam in that course may not proceed to the next level without the approval of the sending teacher. In all honors classes students are expected to maintain a B- or better average. Any student wanting to go from the College Preparatory level to the Honor level **MUST** have the teacher's recommendation and successfully pass the final exam of the current Honor course.

Students who begin German in grades 7 or 9 have the distinct advantage of participating in the GAPP Study Abroad Program with Hamburg, Germany. An exchange program with a Liceo (high school) in Italy is also available for students of Italian. Both German and Italian students are able through these experiences abroad to apply the communication skills already acquired by coming in direct contact with the people and culture of the country. Students of French, Spanish and Latin may also participate in cultural tours of France, Spain and Rome/Pompeii. Because the department strongly believes that education takes place in as well as out of the classroom, we sponsor co-curricular clubs in each language taught and we design cultural after-school activities that engage and motivate students.

In preparation for entering higher education students of the upper level courses are encouraged to take the SAT II in the language, as well as participate in the national contests offered by the professional organization of each language (American Association Teachers of French/German/Italian/Spanish). Melrose is proud to have had both national and state winners of such contests. Furthermore, students who excel in the fifth year honors program in French, Italian, Latin or Spanish are encouraged, upon the teacher's recommendation, to take the Advanced Placement Test offered by the College Entrance Examination Board. There will be a \$15.00 fee per year for the purchase of workbooks.

All courses offered by the Foreign Language department reflect the Melrose High School academic expectations numbers 1, 2, 3, 4, &5.

### **451 French I CP1 1 Credit Grade 9,10,11,12**

This is an introductory course designed for first year students who begin the study of French in High School and for students who studied French at the Middle School and would benefit from additional practice in the language. This course aims to develop basic proficiency in understanding, speaking, reading, and writing. The student will be introduced to the culture of France and other French speaking countries.

**French I** **H** **1 Credit** **Grade 9,10,11,12**

At the end of I quarter, those students who are starting French with a strong background in foreign language, and are earning an A+ may apply to take French I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required.

**403 French II** **H** **1 Credit** **Grade 9,10,11,12**

The honors course in French II will allow students to further develop their proficiency in listening comprehension, speaking, reading, writing and cultural understanding. Students will regularly complete supplementary reading and writing assignments throughout the year and will also be assigned one or more projects.

*Prerequisite: A- or better in French I or Grade 8 French with teacher recommendation*

**453 French II** **CP1** **1 Credit** **Grade 9,10,11,12**

Students will acquire increased proficiency in listening comprehension, and in speaking, and will further the development of skills in reading, writing, and cultural understanding. Writing assignments, reading activities, and projects are included in the program. *Prerequisite: C- or better in French I CP or Grade 8 French*

**411 French III** **H** **1 Credit** **Grade 10, 11, 12**

This course focuses on increased proficiency in the skills acquired during the previous years in order to understand, speak, read and write French with greater accuracy. Supplementary readings and writing assignments of increasing difficulty are included in this course. Projects in French, related to grammatical and cultural topics, will be required. The course will be conducted primarily in the target language. *Prerequisite: B- or better in French II H*

**455 French III** **CP1** **1 Credit** **Grade 10, 11, 12**

This course aims to further develop proficiency in oral communication, reading, and writing. Included in the program are writing assignments and reading activities of increasing difficulty, as well as projects and cultural discussions. *Prerequisite: C- or better in French II CP*

**412 French IV** **H** **1 Credit** **Grade 11, 12**

Since students are expected to perform at a higher level of proficiency, the course is conducted almost entirely in French, with emphasis on oral and written communication. Students will study more complex grammatical topics and will review previously learned structures. Current issues, cultural topics, short stories, plays and novels of increasing difficulty generate topics for writing and discussion. Outside projects are also required.

*Prerequisite: B- or better in French III H*

**457 French IV** **CP1** **1Credit** **Grade11, 12**

This course will be conducted primarily in the target language. The course further reinforces the basic communication skills in listening, speaking, reading, and writing proficiency. The study of more complex grammatical topics and vocabulary will be integrated with the review of previous learned structures. Students will be involved in the study of cultural topics, the completion of relevant reading and writing activities, and projects.

*Prerequisite: C- or better in French III CP*

**410 French V** **CP1** **1 Credit** **Grade 12**

This course will be conducted almost entirely in French and will develop greater accuracy in student's language skills. Students will be challenged to improve their writing and speaking ability. They will become better listeners and readers in the language and they will expand their cultural knowledge through research, class discussions and contemporary readings. Some new structure will be learned, but emphasis will be placed on reinforcing previously learned concepts. Students will frequently be exposed to different media, such as French-language films, the Internet, documentaries and music to aid them in learning about French language and culture.

*Prerequisite: C- or better in French IV*

**415 French V H 1 Credit Grade 12**

In this course, conducted entirely in French, communication skills are reinforced to enable the student to converse with advanced proficiency, read with ease, and express him/her in written composition. The literary selections represent the works of many periods with emphasis on the writings of the 20<sup>th</sup> Century. Integrated in the program will be cultural topics on art, history, and civilization, as well as outside reading and reports on relevant contemporary issues. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the French Language AP exam. *Prerequisite: Teacher recommendation*

**419 French V AP 1 Credit Grade 12**

This course, taught in conjunction with French V 415, follows the syllabus of French Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the French instructor*

**421 German I CP1 1 Credit Grade 9,10,11,12**

This course is designed for students who begin German in High School. It aims to develop basic proficiency in listening, speaking, reading, and writing, and to develop an understanding of German culture and civilization in the context of the 21<sup>st</sup> century.

**German I H 1 Credit Grade 9,10,11,12**

At the end of I quarter, those students who are starting German with a strong background in foreign language, and are earning an A+ may apply to take German for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required.

**420 German II H 1 Credit Grade 9,10,11,12**

This course focuses on increased proficiency in the basic skills acquired during the previous years in order to understand, speak, read, and write German with greater Accuracy. Assignments and projects on the various aspects of German culture and contemporary life will be required in this course. *Prerequisite: A- or better in German I or in Grade 8 German with teacher recommendation*

**422 German II CP1 1 Credit Grade 9,10,11,12**

This course develops further proficiency in the basic skills of listening, speaking, reading, and writing. Various aspects of German culture and civilization are included in the program through interactive learning experiences and the use of video. *Prerequisite: C- or better in German I CP or Grade 8 German*

**428 German III H 1 Credit Grade 10, 11, 12**

This course is conducted almost entirely in German with emphasis on oral communication and correct written expression. Current issues, short stories, plays, and novels of increasing difficulty generate topics of conversation and discussion. Outside projects will also be required in this program. *Prerequisite: B- or better in German II H*

**426 German III CP1 1 Credit Grade 10, 11, 12**

This course aims to reinforce the skills previously acquired in oral and written communications. Conducted in German, the course includes an introductory survey of contemporary German and reading selections which provide the basis for interactive learning activities. *Prerequisite: German II CP*

**429 German IV H 1 Credit Grade 11, 12**

This course is intensive and reinforces the skills acquired in the previous levels of study, with emphasis on oral and written expression. Outside projects are required. Discussion of current German issues provides an opportunity for increasing proficiency in comprehension and oral communication and furthering knowledge of the civilization and culture of the country. *Prerequisite: B- in German III H or A-CP with teacher recommendation*

**425 German V H 1 Credit Grade 12**

Students will converse with ease, read freely, and express thoughts in written composition. The course will emphasize the writings of the 20th century. Cultural topics will be assigned on art, history, music, and the German way of life. Outside projects are integrated into the program through use of interactive technology. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the German Language AP *Prerequisite: German IV H*

**423 German V AP 1 Credit Grade 12**

This course, taught in conjunction with German V (425), follows the syllabus of German Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the German instructor.*

**431 Italian I CP1 1 Credit Grade 9,10,11,12**

This course aims to develop basic language skills in listening, speaking, reading and writing Italian and to provide basic understanding of Italian culture and civilization. The approach is thematic and communicative. Oral proficiency is stress from the very beginning. Students' assignments include research, simple writing and beginner readings.

**Italian I H 1 Credit Grade 9,10,11,12**

At the end of I quarter, those students who are starting Italian with a strong background in foreign language, and are earning an A+ may apply to take Italian I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required.

**432 Italian II CP1 1 Credit Grade 9,10,11,12**

This course is designed to increase proficiency in the basic skills acquired during the previous year in order to understand, speak, read, and write Italian with greater facility and accuracy. Reading assignments and discussions on the various aspects of Italian customs, culture, and civilization are included in the program. *Prerequisite: C-- or better in Italian I CP or Grade 8 Italian*

**430 Italian II H 1 Credit Grade 9,10,11,12**

This course is designed to increase the proficiency skills acquired during the previous year in order to understand, speak, read and write Italian with greater facility and accuracy. Supplementary readings and writing assignment will support classroom discussions. Projects on various aspects of culture and civilization will be integrated into the program. *Prerequisite: A- or better in Italian I or Grade 8 Italian with teacher recommendation*

**433 Italian III CP1 1 Credit Grade 10, 11, 12**

This course further develops proficiency in oral communication, reading of selected materials of increasing difficulty, and practice in written expression. Reports and discussions are directed to contemporary topics of cultural significance, current events, and the different aspects of Italian civilization. Students will be expected to complete outside projects. *Prerequisite: C- or better in Italian II CP*

**416 Italian III H 1 Credit Grade 10, 11, 12**

This course is designed to increase proficiency in the skills through required reading, writing, and oral presentations. Students will be encouraged to produce skits, interpret easy poems and make connections between Italian culture and their own world. There will be a complete review of the fundamentals of Italian grammar applied to a weekly written journal. The course will be conducted mainly in Italian. *Prerequisite: B-or better in Italian II H*

**435 Italian IV CP1 1 Credit Grade 11, 12**

In this course, oral communication will be reinforced, and a complete review of grammatical principles will strengthen written expression. Students will write weekly compositions Quarterly projects will be assigned to students to stimulate creativity and proficiency. *Prerequisite: C- or better in Italian III CP*

**417 Italian IV H 1 Credit Grade 11, 12**

Through development of oral proficiency, this course will further develop skills in written expression and reading comprehension. Historical research, contemporary literature, and current events, will serve as a basis for classroom discussions and/or assignments. Students will write weekly compositions. Incorporated into the program, will be outside projects, reports and independent study. The course will be conducted mainly in Italian. *Prerequisite: B- or better in Italian III H*

**438 Italian V H 1 Credit Grade 12**

In this course, conducted entirely in Italian, a student will have the opportunity to use conversational skills with advanced proficiency, read with ease, and express him/herself in weekly written compositions. The literary selections represent the works of many periods with emphasis on the writings of the 20<sup>th</sup> Century. Integrated in the program will be cultural topics on art, history, and civilization, as well as outside reading and reports on relevant contemporary issues. *Prerequisite: B- in Italian IV H or A- in Italian IV CP with teacher recommendation*

**469 Italian V AP 1 Credit Grade 12**

This course, taught in conjunction with Italian V 438, follows the syllabus of Italian Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the Italian instructor*

**491 Latin I CP1 1 Credit Grade 9,10,11,12**

The study of Latin helps students develop an awareness of the functions and structures of languages; it strengthens their English vocabulary, reading and writing, and critical and analytical skills. It also provides a background in ancient history, society, and government, as well as in Classical literature and philosophy. In the first year, students learn the fundamentals of Latin grammar and vocabulary, and develop fluency in reading and translating Latin.

**Latin I H 1 Credit Grade 9, 10, 11, 12**

At the end of I quarter, those students who are starting Latin with a strong background in foreign language, and are earning an A+ may apply to take Latin I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required.

**484 Latin II H 1 Credit Grade 10, 11, 12**

The purpose of this course is to intensify the student's knowledge of vocabulary, grammatical concepts and syntax in the application of writing, and in understanding reading in the original Latin text. Students will also be expected to apply their skills in the completion of culture-based projects to be assigned each quarter of the school year. *Prerequisite: A- or better in Latin I with teacher recommendation*

**492 Latin II CP1 1 Credit Grade 10, 11, 12**

The content of the material previously studied will be reinforced by a thorough review. Through reading, expansion of one's vocabulary base, and increased knowledge of grammatical usage, students will be able to interpret the origins of English vocabulary and grammar and recognize the differences and similarities in both languages. Students will also discover Roman life and culture by reading and translating original works geared to their level of instruction. *Prerequisite: C- or better in Latin I*

**482 Latin III CP 1 Credit Grade 11, 12**

In this course, students learn about Roman civilization while reading selections in Latin from the Cambridge Latin Course textbooks. The Cambridge Latin Course offers readings in Latin that carefully increase graduated complexity. The course also presents information on Latin grammar, interspersed with Latin readings that illustrate new grammatical concepts. The course presents extensive information on Roman civilization, both in Latin and in English.

**485 Latin III H 1 credit Grade 11, 12**

This course is primarily a literature course in which students learn about Roman civilization while reading major works of prose and poetry from the Classical period. Authors vary from year to year, and may include poems by Catullus and Horace, selected passages from Vergil's *Aeneid* and Ovid's *Metamorphoses*, as well as letters and speeches by Cicero, and selections from Caesar's *Commentaries on the Gallic Wars*. The Classics are supplemented with Latin translations of well-known fairy tales and modern works, and with exercises designed to enable students to use Latin conversationally. *Prerequisite: B- or better in Latin II, H.*

**494 Latin IV H 1 Credit Grade 12**

This course is intensive and has been designed for the study and appreciation of Latin poetry. It is primarily devoted to the reading of Virgil's *Aeneid*, though significant works of other authors will also be studied, giving the advanced student a broader understanding of classical literature, and the cultural influence of Rome on Western Civilization. *Prerequisite: Latin III H*

**495 Latin IV AP H 1 Credit Grade 12**

This course follows the syllabus of Advanced Placement Latin Literature, and is designed to help students prepare to take the AP Latin Literature Exam. Students registered in this course elect to focus—as a class—on one of the AP Latin Literature programs: Catullus and Ovid, Catullus and Horace, or Catullus and Cicero. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the Latin instructor*

**441 Spanish I CP1 1 Credit Grade 9,10,11,12**

This introductory course is designed for students who begin Spanish in High School. It will allow students to concentrate on developing basic skills in writing and reading. Listening comprehension and speaking skills will also be integrated as the course progresses. Students will gain insight into the various aspects of Hispanic culture and contemporary life.

**Spanish I H 1 Credit Grade 9,10,11,12**

At the end of I quarter, those students who are starting Spanish with a strong background in foreign language, and are earning an A+ may apply to take Spanish I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required.

**470 Spanish II H 1 Credit Grade 9,10,11,12**

This course offers continuity of learning and further proficiency in listening comprehension, speaking, reading, writing and cultural understanding. Discussion in Spanish on the various aspects of Hispanic culture and contemporary life is an integral part of the program. *Prerequisite: A- or better in Spanish I CP or Grade 8 Spanish with teachers recommendation and successful completion of a departmental entrance exam.*

**443 Spanish II CP1 1 Credit Grade 9,10,11,12**

Proficiency in the basic skills acquired in previous courses will be reinforced and expanded. Students will learn to develop complete thoughts, both orally and in writing. Various aspects of Hispanic culture will be integrated in this course. *Prerequisite: C- or better in Spanish I CP or Grade 8 Spanish*

**471 Spanish III H 1 Credit Grade 10, 11, 12**

This course is conducted almost entirely in Spanish with emphasis on oral and written communication. Current issues, short stories, and reading selections of increasing difficulty provide topics for discussion. Outside projects are also included in this program. *Prerequisite: B- or better in Spanish II H*

**444 Spanish III CP1 1 Credit Grade 10, 11, 12**

The purpose of the course is to develop proficiency in oral, written, and spoken communication and cultural appreciation. There will be selected reading materials of increasing difficulty, oral discussion, and practice in written expression. Outside readings are included in the program. *Prerequisite: C- or better in Spanish II CP*

**475 Spanish IV H 1 Credit Grade 11, 12**

Students at this level will be expected to converse freely, read with ease, and express themselves in written composition. Reading selections are chosen from Hispanic literature. Outside projects and reports on contemporary matters of relevant significance are included in the program. *Prerequisite: B- or better in Spanish III H*

**447 Spanish IV CP 1 Credit Grade 11, 12**

This course aims to increase proficiency in comprehension, oral communication, reading, and writing. Selections drawn from contemporary prose and current periodicals serve as a basis for oral discussion. Outside projects and reports are integrated in the program. *Prerequisite: C- or better in Spanish III CP*

**407 Spanish V CP 1 Credit Grade 12**

In this course students will strengthen their speaking and writing proficiency. Various literary selections, both in Spanish and in translation, will serve as a basis for classroom activities. Students will have the opportunity to review and improve their understanding of grammar as well as their listening comprehension and speaking skills. Integrated in the program will be cultural topics on art and history as well as outside reading and reports on relevant contemporary issues. Students will also be exposed to different media, such as Spanish-language films, the Internet and music as they advance their knowledge of Spanish and Hispanic culture. *Prerequisite: C- or better in Spanish IV, CP.*

**449 Spanish V H 1Credit Grade12**

In this course, conducted entirely in Spanish, students will be able to converse with advanced proficiency, read with ease, and express themselves in written composition. Literary selections from various periods, with emphasis on the writings of the 20<sup>th</sup> Century, will serve as the basis for classroom activities. Integrated in the program will be cultural topics on art, history, and civilization, as well as outside reading and reports on relevant contemporary issues. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the Spanish Language AP exam. *Prerequisite :B- in Spanish IV H or A- in Spanish IV CP with teacher recommendation*

**405 Spanish AP 1Credit Grade 12**

This course, taught in conjunction with Spanish V 449, follows the syllabus of Spanish Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the Spanish instructor*

---

---

# Science

---

---

The courses in Science serve two objectives: 1) to insure that those individuals who desire to pursue science-related studies and careers will be prepared with a good foundation necessary to continue further education and training and 2) to provide students with a challenging learning environment to attain a common core of knowledge, concepts, skills, analytical methods and strategies to become responsible citizens and successful problem solvers in a changing world. The class of 2010 now has the additional requirement of passing a science MCAS test for graduation. All ninth graders will be expected to take this exam in the spring.

Three credits in Science are required for graduation, with a Science required in grade 9. College, technical schools, and schools of nursing, etc., have their own requirements. If you intend to study in a scientific-technical field, three years of science is highly recommended in grades 10-12. Present day emphasis on science and technology would strongly require four years of science for college preparation. Science courses at all levels address academic expectations 1 – 4. However, those expectations that are stressed are enumerated.

**520 Physical Science** **CP1** **1 Credit** **Grade 9**

This course is a survey course in basic physical science principles, including characteristics of light and sound in the classification and organization of matter, and a study of Planet Earth. This course is strongly reliant upon principles Algebra. Chemical and physical properties and reactions will be covered along with a study of the atmosphere, the properties of oceans and freshwater, teacher demonstrations, simple experiments and textbook assignments. It is expected that students take a biological science in grade 10. Targeted Student Expectations (See Pg.4): 1, 2, 4

**535 Insights to Physical Science** **CP2** **1 Credit** **Grade 9**

This basic survey course in science presents the classification and organization of matter, some basic physical science principles and a study of our Planet Earth. Chemical and physical properties and reactions will be studied along with the impact of pollution on our oceans, freshwater and atmosphere through simple experiments, teacher demonstrations, and textbook assignments. *Prerequisite: Teacher recommendation and department approval.* This course is usually followed by Life Science. Targeted Student Expectations (See Pg.4): 1, 2

**508 Biology 1** **H** **1 Credit** **Grade 9, 10**

The course focuses on six basic themes: Evolution, Unity within Diversity, Use of Energy, Patterns of Change, Systems and Interactions, and the Nature of Scientific Inquiry. Each theme is studied using lecture, laboratory experiments, and reading assignments. *Prerequisite: An "A-" in Science with teacher recommendation and a Spring placement exam.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**531 Life Science** **CP2** **1 Credit** **Grade 10, 11**

This course focuses on major life processes (nutrition and digestion, reproduction and development, transport, respiration, excretion, support and locomotion, chemical control and nervous control). These processes are compared using a variety of organisms from the five kingdoms of living things. *Prerequisite: Teacher recommendation and department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 3

**522 Biology 1** **CP1** **1 Credit** **Grade 10, 11**

This course focuses on major biological topics (Cell Biology, Genetics, Evolution, Ecology, Kingdoms & Human Systems). Each theme is studied using lecture, projects, laboratory experiments & reading assignments. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**509 Biology 2** **H** **1 Credit** **Grade 11, 12**

Biology 2 deals with living systems at the molecular, cellular, organism, and societal levels. These areas are explored in depth, with emphasis placed on knowledge of the research that has resulted in our present understanding of biology. This course incorporates lab experiences which help prepare students for career oriented courses in biotechnology, medicine and the environmental sciences. **Prerequisite:** *Biology 1 H or an "A" Biology 1 CP with department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**562 Marine Ecology** **CP1** **1 Credit** **Grade 11, 12**

Marine Ecology introduces students to ecology of saltwater ecosystems. Topics covered include: ecology basics; properties of water; chemical and physical oceanography (dissolved substances, properties of waves and currents); geological oceanography (seafloor topography, coasts and beaches); marine ecosystems and biodiversity. Global climate issues will be discussed. There is a lab contingent. This will include microscope work; gross anatomy of organisms; taxonomy; and water analysis. Students should be familiar with chemistry and conceptual Physics. **Prerequisite:** *2 years of science.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**502 Advanced Placement Environmental Science** **AP** **1 Credit** **Grade 11, 12**

AP Environmental Science is designed to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world and to identify and analyze environmental problems both natural and human made. Environmental Science is interdisciplinary. The following themes will provide a foundation for the course: energy conversions, changing natural systems, biochemical systems, technology and human impact on the environment, cultural, social economic factors and developing practices that will achieve a sustainable world. **Prerequisite:** *Teacher recommendation and department approval. Students will prepare for and be required to take the AP Environmental Exam.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5

**538 Environmental Science** **H** **1 Credit** **Grade 11, 12**

Environmental Science is designed to provide students with the scientific principles, concepts and methodologies needed to understand the interrelationships between organisms and their environment. Environmental Science is an interdisciplinary course where students will identify and analyze environmental problems. Topics covered include; energy conversions, changing natural systems, biochemical systems, technology and the human impact on the environment, cultural, social economic factors and developing practices that will achieve a sustainable world. **Prerequisite:** *Teacher recommendation and department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5

**572 Environmental Science** **CP2** **1 Credit** **Grade 11, 12**

This course is an introduction to the study of how humans interact with their environment and the resulting consequences as well as what can be done to improve those interactions. Some important topics covered include basic ecological principles, ozone depletion, global warming, energy conservation, natural resources, air and water pollution and biodiversity. **Prerequisite:** *Teacher recommendation and department approval.* Targeted Student Expectations (See Pg.4): 1, 2, 5

**557 Anatomy and Physiology** **H** **1 Credit** **Grade 10, 11, 12**

An in depth systematic survey of the structure and function of the human body, this course is a lab oriented course in which a rat is dissected. This course is designed to introduce students pursuing a career in medicine to the structure and function of the human body. **Prerequisite:** *Biology 508 or Biology 522 "A- and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**554 Anatomy & Physiology** **CP1** **1 Credit** **Grade 10, 11, 12**

A systematic survey of the structures and functions of the major systems of the human body, this course is a lab oriented course in which the fetal pig is dissected. Emphasis is placed on the causative agents for the normal and abnormal functioning of the systems. **Prerequisite:** *Biology 522 "B-" or better.* Targeted Student Expectations (See Pg.4): 1, 2

**558 Structure and Function of the Human Body**      **CPII**      **1 Credit**      **Grade 11, 12**

A systemic survey of the anatomy and physiology of the major systems of the human body will be covered in this course. Emphasis is placed on the body in health and disease. *Prerequisite:* *Teacher recommendation and teacher approval.* Targeted Student Expectation (See Pg. 4): 1, 2

**575 Bioethical Issues**      **CP1**      **½ Cr edit**      **Grade 11, 12**

An interdisciplinary topic, Bioethics combines sciences, including genetics, medicine, and ecology, along with law, philosophy, history, and pedagogy. Issues covered are extremely relevant to everyday life. The cases presented require students to revisit areas they have previously learned in other science courses to study the topics presented in this course. Problem solving, comparing and contrasting, explaining, listening, writing, decision making, and discussion will be important aspects of this course. *Prerequisite:* *Successful completion of Biology 1.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**518 Chemistry 1**      **H**      **1 Credit**      **Grade 10, 11**

Emphasis is placed on a theoretical and mathematical approach to the more advanced concepts of the nature of matter and its chemical interactions, with an equal stress on accurate and meaningful laboratory experiences. The combination of this course and Chemistry 2 is designed to approximate the essentials of first year college chemistry. *Prerequisite:* *Biology 1 H or "A" in Biology 1 CP with department approval. Student must be in an Honors Math class.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**523 Chemistry 1**      **CP1**      **1 Credit**      **Grade 11, 12**

This course covers the most frequent theories of the nature of matter and its interaction. Major emphasis will be on chemical interactions from both a descriptive and mathematical approach. The student will derive conclusions from laboratory experiments and solving problems. *Prerequisite:* *Must be taking a CP Math class concurrently.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**545 Chemical Interactions**      **CP2**      **1 Credit**      **Grade 11, 12**

This course emphasizes the relationship of chemistry to other disciplines such as biology, physics, environmental sciences, earth science, and everyday life. Emphasis will also be on developing basic skills and laboratory techniques in chemistry and on solving problems. *Prerequisite:* *"C" or better in Algebra 1.* Targeted Student Expectations (See Pg.4): 1, 2

**519 Chemistry 2**      **H**      **1 Credit**      **Grade 11, 12**

The principal goal of this course is to provide a broad overview of the principles of chemistry, the reactivity of the chemical elements and their compounds, and the applications of chemistry. A major objective is to provide the tools needed for students to function as a chemically literate citizen. This course will put an emphasis on advanced placement chemistry experiment. (B or better)

**539 Physics 1**      **H**      **1 Credit**      **Grade 11, 12**

This course is a mathematics-based treatment of physical phenomenon. Emphasis is placed on mechanics, including wave motion. Laboratory work and independent design projects are also part of the course requirements. A scientific calculator is required. *Prerequisite:* *Chemistry 1 H and if Pre-Calculus H has not been completed or will not be taken concurrently, a meeting with the Department Chair is required to elect this course.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**544 Physics 1**      **CP1**      **1 Credit**      **Grade 11, 12**

This course emphasizes the physical principles that explain the motion of objects. Topics include: description of motion, Newton's Laws, vectors, waves, sound, light, electricity and magnetism. Physical concepts are emphasized; problem-solving is also included. The course requirements include laboratory work, and use of computer-based data analysis. *Prerequisite:* *Algebra 2 CP.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**504 Advanced Placement Physics** **AP** **1 Credit** **Grade 12**

This course will follow the curriculum prescribed for an Advanced Placement Physics B Level class. The B Level includes: mechanics, thermodynamics, electricity and magnetism, optics, atomic physics and nuclear physics. **Students will prepare and be required to take the AP Physics B exam. Prerequisite:** “B+” or better in Physics 539 and teacher recommendation. Students must have a scientific calculator. Students will prepare for and be required to take the AP Physics exam. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**564 Meteorology** **CP1** **½ Credit** **Grade 11, 12**

Study the Earth’s atmosphere, weather, and climate. Topics include all aspects of weather and their causes such as; precipitation, clouds, storms, hurricanes, and tornadoes. The course will include laboratory and project work. A working knowledge of chemistry and physics is helpful. *Prerequisite: Two years of science.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**567 Astronomy** **CP1** **1 Credit** **Grade 11, 12**

This class will provide students with an introduction to astronomy following an “Earth-out” progression. The Moon and its effects on the Earth will be studied in detail. From there, the class will move outward through our solar system and the Milky Way galaxy. Life cycle of the stars (including black holes), and the formation of solar systems, galaxies and the universe will be addressed. Time permitting will allow for exploration of SETI (search for extraterrestrial intelligence). A variety of texts will be provided. A working knowledge of chemistry and physics is helpful. *Prerequisite: Two years of science.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**566 The Science in Science Fiction** **CP1** **½ Credit** **Grade 10, 11, 12**

This one semester course would examine basic science concepts in the context of science fiction stories. The students will read classical science fiction stories by H.G. Wells, Heinlein, Niven and Pournelle, and Asimov and discuss the science ideas behind the stories. We will also use popular science fiction movies and television programs like Star Trek, Forbidden Planet, Armageddon, and others to discuss topics like: gravity, special relativity, faster than light travel, black holes, the structure of matter, time travel, matter and anti-matter, and electromagnetic radiation. The course will be interdisciplinary in nature, combining reading comprehension, writing and mathematical skills. Targeted Student Expectations (See Pg.4): 1, 2, 4

---

---

## Fine and Performing Arts

---

---

### Music

The Music Department offers courses and activities for the performer in the larger performance organizations. Each student identifies his/her own interests and needs for creative self-expression and is encouraged to freely elect from one or more of the following areas of music: chorus, band, orchestra. Any of the following courses may be applied toward the graduation requirement for Fine/Applied Arts.

Students enrolled in the performing organizations are granted full credit when they have met the requirements of performance at all scheduled concerts and major activities.

Membership in a choral or instrumental organization is a prerequisite to auditioning for membership in the Massachusetts Northeastern District, the Massachusetts All-State, or any similar organization, which has the approval of the Massachusetts Music Educators' Association.

**621 Band PD 1 Credit Grade 9,10,11,12**

The Band is open to all qualified students. The Band performs for all varsity football games, competitions, formal concerts, parades, pops concert, and graduation. In order to receive full credit, the student is required to perform at ALL FORMAL PROGRAMS and rehearsals scheduled. *Prerequisite:* Audition and/or participation in All Year Middle School Bands. Targeted Student Expectations (See Pg.4): 1, 4, 5

**627 Chorus PD 1 Credit Grade 9,10,11,12**

**628 Chorus PD ½ Credit Grade 9,10,11,12**

The chorus is open to all students. The great variety of performances includes music from the current Broadway productions to the classics. Each year, members of the chorus participate in Christmas Concerts, Winter Concerts, Spring Concerts, and many concerts for local civic groups. In order to receive full credit, each student is required to perform at ALL FORMAL PROGRAMS and rehearsals scheduled. Targeted Student Expectations (See Pg.4): 1, 2, 4,

**638 Orchestra PD 1 Credit Grade 9,10,11,12**

The orchestra is open to all students who play stringed instruments and to selected woodwind, brass, and percussion players to balance the instrumentation. Rehearsals provide for the development of skills in performance, sight reading, and concert and show production. To receive full credit, the student is required to perform at ALL FORMAL PROGRAMS and rehearsals scheduled. Targeted Student Expectations (See Pg.4): 1, 4, 5

**626 Music Theory PD ½ Credit Grade 10, 11, 12**

This course teaches the student to develop music writing skills, starting with the basic construction of a major scale, developing key signatures and learning the basic structure of traditional four part harmony writing. This course will give the student skills to write music using chords, inversions, passing tones, suspensions, and original melodies with harmony parts up to four voices. *Prerequisite:* Teacher recommendation. Targeted Student Expectations (See Pg.4): 1, 2, 4

**625 History of Music PD ½ Credit Grade 9, 10, 11, 12**

This course presents a history of music through various compositions, including orchestral, vocal and opera examples of various musical periods. Students will be expected to develop an understanding of various compositions, composers, and the period of music in which they lived. Targeted Student Expectations (See Pg.4): 2, 4, 5

## Co-Curricular Programs in Music

The Music Department makes available to students several co-curricular activities. Students in these groups are selected on an elective/selective basis through auditions.

Brass Ensemble	Megatones
Band Front	Chamber Ensembles, String Quartet
Jazz Band	

## Art

The Art Department offers a variety of courses designed to bring out and strengthen the natural creativity of all students. Through diverse projects, students will learn fundamental art skills and concepts, experience the use of a variety of media and materials, and develop their own unique talents. Students will be introduced to various artists and art movements and will discover basic art history.

The Arts Sequence is a series of courses designed for those students who really like art and think they may want to continue taking art through high school. These full year courses are Art I, Arts & Crafts, 2-D Art (1, 2 & 3), and 3-D Art (1 & 2). Serious students have an opportunity to receive **Advance Standing** in art by submitting a portfolio to the Art Department in the spring of any year.

The Art Department will review these portfolios and designate honors credit to deserving students. Although this will not affect rank in class, the honors credit will appear on students' transcripts when applying to college. Students must receive a grade of B- or better to continue in the Arts Sequence. **Homework will be an integral part of these courses.**

The Art Department also offers exploratory courses for those students who want to try an art class to see if they like it. These courses are Introduction to 2-D Art and Sculpture. These classes allow students to experiment with a wide range of media and processes within the subject.

### 700 **Art 1** **PD** **1 Credit** **Grade 9,10,11,12**

This foundation art course will teach students the fundamentals of drawing and design. A major part of the year will be spent on teaching students how to draw what they see. Observational drawing will be stressed as students learn how to depict light and shadow, correct proportions, and one and two point perspective. Design concepts will be taught as students explore composition through a variety of media. Properties of color will be studied through tempera, gouache, and acrylic painting.

### 725 **Arts & Crafts** **PD** **1 Credit** **Grade 10, 11, 12**

This intermediate art class will include work in both two – and three dimensional media. Students will develop drawing and painting skills through more challenging media, such as charcoal, pastels, and acrylics. Sculpture units include work with clay, wire, paper mache, and plaster. **Prerequisite:** *Foundation Art.*

### 723 **2-D Art 1** **CP** **1 Credit** **Grade 11, 12**

In this advanced art course, students will spend a full year immersed in drawings and painting. Students will strengthen their ability to draw what they see by studying landscapes, still life and figure drawing. A series of assignments will help students improve skills and develop a personal style. Completed work will result in a portfolio. **Prerequisite:** *Art I and portfolio approval.* Targeted Student Expectations (See Pg.4): 1, 4, 5

### 731 **2-D Art 2** **H** **1 Credit** **Grade 11, 12**

In this sequel to 2-D Art I, advance students will continue to explore drawing and painting in depth. Drawing skills will be strengthened as students work more independently. New media, such as pastel painting, oils and watercolors will be introduced. **Prerequisite:** *2-D Art I and portfolio approval.* Targeted Student Expectations (See Pg.4): 1, 4, 5

- 728 2-D Art 3** **H** **1 credit** **Grade 12**  
Students will continue to develop skills learned in 2D Art 2. They will be expected to handle light and shadow, composition and color in an advanced way. Students will hone their ability at drawing what they see. The entire year will be spent on drawing and painting projects.
- 724 3-D Art 1** **CP** **1 Credit** **Grade 12**  
This full year course is for third-year art students who enjoy working in three-dimensional media. Through advanced projects in ceramics and sculpture, students will develop a personal style. Students may take up to two years of 3-D Art. **Prerequisite:** *Art I and Arts & Crafts*. Targeted Student Expectations (See Pg.4): 1, 4, 5
- 732 3-D Art 2** **H** **1 Credit** **Grade 12**  
This full year course is open to fourth-year art students who want to concentrate on sculpture. Students will/ be expected to work more independently as they further explore 3-D media. **Prerequisite:** *3-D Art and portfolio approval*. Targeted Student Expectations (See Pg.4): 1, 4, 5
- 720 Introduction to Two-Dimensional Art** **PD** **½ Credit** **Grade 9,10,11,12**  
In this course, students will explore drawing, painting and design. The semester begins with a unit in drawing, which is followed by exploration of color in a variety of painting media, including tempera, watercolor and acrylics. Other 2-D areas include scratchboard, textile and fabric design, printmaking and mosaics. Targeted Student Expectations (See Pg.4): 1, 4, 5
- 733 Introduction to Sculpture** **PD** **1 Credit** **Grade 9,10,11,12**  
In this course, students will be introduced to a variety of 3-D media including plaster and paper mache. Students will learn to form as the experiment with traditional sculpture materials. Student Expectations (See Pg.4): 1, 4, 5
- 712 Photography 1** **PD** **½ Credit** **Grade 10-12**  
Emphasis is placed on the use of black and white photography as an art form while covering the process, techniques, and aesthetics involved in taking, developing, and printing photographs. **Students must have the use of a 35-mm camera** and are required to purchase photographic paper and film. Approximate cost of film and paper will be \$35.. Assignments outside of class are required. **Prerequisite:** *Intro to Drawing and Painting or Art I*. Targeted Student Expectations (See Pg.4): 1, 2, 4
- 719 Photography 2** **PD** **½ Credit** **Grade 10-12**  
In Photography 2, students will work on advanced photographic techniques. They will learn different manipulative processes in and out of the darkroom. In addition, they will learn about digital imaging on the computers with Adobe Photo Shop. This will include scanning their own photographs and manipulating them in the manor of professional digital photographers. **Students must have the use of a 35-mm camera** and are required to purchase photographic film and paper. Approximate cost of film and paper will be \$35.00. **Prerequisite:** *Photography 1, B or better in Photograph I*. Targeted Student Expectations (See Pg.4): 1, 2, 4
-

---

---

## Business & Technology

---

The responsibility of the Business and Technology Department is to provide a program for students who desire and can profit in business and technology training and which will equip them with the knowledge and skills related to their needs for college preparation or business and industry employment.

Business and Technology courses are of value to ALL students, including the college bound, because career choice is one of life's most important decisions and because each student's life will be affected by technology in one way or another. Exploratory and advanced experiences are provided for students to introduce them to technology and its applications. Students also gain information in many of the courses on how to prepare for professions and careers. Salaries, working conditions, benefits, advancement opportunities, labor market forecasts, related information, and other work satisfactions complement the information, knowledge and skills. Skills development is a priority as students discover talents, clarify values, and define goals. Business and Technology courses meet academic expectations 1 – 5. However, those expectations that are stressed are enumerated.

### **713 Television Production 1** **CP** **½ Credit** **Grade 9-12**

This is a half year course. An introduction to all of the elements of making a video or television program. Students will learn in-studio production such as; directing, technical directing, camera work, audio and character generator (graphics) as well as remote on-location production. Scriptwriting, organization, care and maintenance of equipment will be covered. Each student is required to do one on-location shoot per quarter. No previous experience is necessary, but a page long, typed, double spaced essay is required by each potential student, stating the reasons they want to take the class. Only those with sincere interest proven in their essay will be allowed to take the class. The Final Project in this class is a five minute documentary. Only students who get a B or above in this project will be eligible for Advanced Television Production or Broadcast Journalism. Those who elect to take the Final Exam instead of their Final Project will not be eligible to take Advanced Television Production.

### **722 Advanced Television Production** **CP** **1 Credit** **Grade 10 - 12**

This is a year long course. Students are required to produce projects that will be cablecast on METV Channel 15, our school channel. The first half of the year will concentrate on projects assigned by the instructor. The second half will consist of student's own projects as approved by the instructor. Written (typed) proposals are required before each project is begun.

Students are eligible for this class only if they have a B average or above in Television Production 1 and have gotten a B or above in the Final Project for that class. Students are not eligible for this class if they elected to take the Final Exam instead of a Final Project in TV 1.

### **715 Broadcast Journalism & Documentaries** **CP** **1 Credit** **Grade 10 -12**

A full credit Honors course which lasts the entire school year. This will be discussed in Television Production 1 and Advanced TV Production. Broadcast Journalism and Documentaries is responsible for News Channel 15, the news show that is regularly produced by and for MHS students. Writing news stories is a requirement. At least one written story is required weekly from each student. Students will also be required to produce documentaries. Each documentary must be preceded by a typed proposal regarding subject matter, people involved, equipment used, and projected length of time required to finish. Elements of production and post production learned in Television Production 1 and Advanced TV will be utilized here. To enter this class, a student must produce a "news package" during TV Production 1 or Advanced TV Production, plus have permission from the instructor.

### **886 Business Management & Law** **CP** **½ Credit** **Grade 11, 12**

This course will provide a practical working knowledge as to how to plan, set up, and run a successful business. Students interested in small business ownership, business management, or post high school business administration training should take this course. Organization, marketing, finance, distribution, advertising, credit, budgets, taxes, stocks and bonds, employee relations, and government regulations are studied. Legal foundations of business ownership, management, and employment are developed which relate to contracts, sales, insurance, administration of law, public and private torts, and statutory regulations. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**887 Accounting 1** **CP** **1 Credit** **Grade 10, 11, 12**

Accounting 1 provides the student with an introduction to accounting principles, examining basic accounting theory and applying theory to business and providing a general understanding of business methods and concepts and the ability to make business judgments. Accounting 1 will explore the entire accounting cycle. The student will be provided with the essential background to concentrate on more advanced accounting courses in two-and four year colleges. This course is a “must” for college business administration majors and future business careers. Computerized Accounting will be introduced. **Prerequisite:** *Algebra 1 completed or taken concurrently.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**890 Accounting 2** **H** **1 Credit** **Grade 11, 12**

Students will work on individual projects and simulated accounting sets, with “hands-on” experience using a computer. Emphasis is given to accounting for partnerships, corporations, and cost accounting, including the voucher system and analysis and comparison of financial reports. This course is a “must” for all students planning a major in the many fields of business and economics at the college level. **Prerequisite:** *“C” or better in Accounting 1 and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**885 Personal Finance** **CP** **1 Credit** **Grade 10, 11, 12**

Personal Finance is a course designed to help students take charge of their future. Now more than ever, making sound financial decisions is extremely important. The goal of this course is to help students become lifelong skillful managers of personal finance. Topics covered will include: budgeting your money, personal earning power, checking accounts, saving accounts, credit use and credit cards, purchasing goods and services, insurance, personal income tax, investment fundamentals and auto and home buying. Don’t just survive the world. THRIVE!

**869 Microsoft Office** **CP** **1 Credit** **Grade 9,10,11,12**

This course is designed to help students become proficient in word processing using Microsoft Word, Excel spreadsheets, Access and Power Point. The students will progress from basic to advanced concepts through the use of hands on application material. If time permits, students will be introduced to web page design. In addition, students will be required to work on their own keyboarding skills using keyboarding software. The skills developed will be useful to students for both college and job settings. Targeted Student Expectations (See Pg.4): 1, 2, 4

**873 Web Page I** **CP** **½ Credit** **Grade 10, 11, 12**

Have you ever wondered how the professional looking web pages on the Internet are made? Do you want to have the skills to create web sites? This course teaches the basics of building and maintaining a site on the Internet. We discuss Internet terminology and how the Internet and its associated technologies work. The Hypertext Markup Language (HTML), a basic Internet computer language, will be taught step by step as well as other software tools like Front Page and Photoshop. Students will also learn the basics of *Javascript*. Targeted Student Expectations (See Pg.4): 1, 2, 4

**874 Web Page Design with Javascript** **CP** **½ Credit** **Grade 11, 12**

Students will learn how Java scripts can be used effectively to create more interactive web pages. Students will learn Java basics and will be able to create dynamic Java applets to help those visiting their web pages. The course will explore Java navigation tools, search engines, slide shows, and other information selection and presentation utilities. **Prerequisite:** *Web Page Design.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**822 Computer Aided Design 1** **CP** **1 Credit** **Grade 9,10,11,12**

The ability to effectively communicate through technical images within an industrial or construction environment will be the focus of this course. Students will develop the technical concepts to effectively create and draft technical designs for a variety of products, concentrating on drafting concepts, applications of engineering, and industrial standards within the design process. Students will develop portfolio materials and research at least two related careers within this cluster of careers. Highly recommended for students considering careers in engineering. **Prerequisite:** *Algebra I or Geometry, completed or taken concurrently.* Targeted Student Expectations (See Pg.4): 1, 2

**823 Computer Aided Design 2** **H** **1 Credit** **Grade 10, 11, 12**

The focus of this course will be on the development of CAD and drafting skills required for entry into the work world. Topics covered include electronics, mechanical, architectural, presentation graphics, 3-D computer applications and technical illustrations. Students will develop portfolio materials and research at least two related careers within this cluster of careers. **Prerequisite:** *Successful completion of Computer Aided Design 1.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**824 Computer Aided Design 3** **H** **1 Credit** **Grade 11, 12**

Students will select to specialize in one or two of the career pathways within CAD 2. Focus will be on 3-dimensional applications. Students will develop portfolio materials and research at least two related careers within this cluster of careers. **Prerequisite:** *Successful completion of Computer Aided Design 2 and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, and 4

**825 Computer Aided Design 4** **H** **1 Credit** **Grade 12**

Students will select to specialize in one or two of the career pathways within CAD 2. Focus will continue to be on 3-dimensional applications. Students will continue their portfolio and will research at least one related career within this cluster of careers. This course may be repeated for credit. **Prerequisite:** *Successful completion of Computer Aided Design 3 and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, and 4

**827 Animation I** **H** **1 Credit** **Grades 11, 12**

Students will be introduced to the world of animation in modern times by means of a computer. The students will work at beginner tutorials on creating people and working with kinematic motion. Some examples of the animation the students will be working with are creating umbrellas with rain falling as a special effect, ghosts, laser cut letters, Jack-O-Lantern, ski pole grips and blooming flowers. **Prerequisite:** *Successful completion of Computer-Aided Design 1 & 2, and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, 4

**828 Animation II** **H** **1 Credit** **Grade 12**

Students will be working on more advanced animations on the computer. The special effects will be increasing as well as sounds, lights, and extra cameras. Introduction into drawing humans and characters and walk through of houses will be extensively worked on. Examples of some tutorials are shipwrecks, robots, jeeps and model cars, motorcycles and planes. **Prerequisite:** *Successful completion of Animation I and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, 4

---

---

# Comprehensive Health Education

---

---

The Comprehensive Health Education Program encompasses the following disciplines: Health and Physical Education as well as Family and Consumer Science. The primary goals for our Comprehensive Health Program are to educate and empower every student by providing health knowledge, and life skills that promote wellness and reduce health-related risk behaviors. Skills are introduced that will help students become responsible and productive adults. Course offerings, within our Comprehensive Health Program, address all academic expectations.

Current health education curriculum literature identifies thirteen content areas. From these content areas students will acquire health knowledge and life skills that will promote responsible decision-making and help develop them into self-sufficient adults. The thirteen content areas are identified below and are addressed throughout the three disciplines:

Growth and Development	Mental Health
Physical Activity	Family Life
Nutrition	Interpersonal Relationship
Disease Prevention and Control	Consumer Health and Resource Prevention
Safety and Injury Prevention	Ecological Health
Tobacco, Alcohol and other Substance Use/Abuse Prevention	Community and Public Health
Violence Prevention	

The physical education program seeks to develop positive attitudes and an appreciation for activity and healthful living through various team and individual activities. Acquisition of motor skills, positive attitudes towards activity, fitness and the development of a healthy body and mind are primary objectives of the program. Students are allowed to select activities from physical fitness activities, individual and dual sports as well as team sports.

“Wellness” courses blend the disciplines of health and physical education. Team taught by health and physical education teachers, students are taught to lead a meaningful, healthy lifestyle by introducing them to physical activity, knowledge, habits, and conduct which will serve to improve their quality of life.

The goal of the Family and Consumer Science program is to help students develop into responsible and productive adults by introducing them to life-relating skills that they need to succeed in society. The skills gained in these courses may be cultivated into careers. Students can pursue higher education in areas such as early childhood education, dietary science, fashion design, clothing construction, interior design, consumerism and in the food service industry.

Health, Physical Education and Family Consumer Science utilize multiple learning styles for students to acquire, analyze and apply knowledge to improve their quality of life. Students exhibit clear, effective communication within the programs, while critically assessing themselves to successfully meet the goal of each program.

## **801 Lifetime and Recreational Activities** **PD** **½ Credit** **Grade 11, 12**

This course will provide students in grades 11, 12 the opportunity to participate in fitness activities that provide lifetime benefits such as, weight training, jogging, and aerobic walking. Also, students will be able to choose recreational activities such as basketball, volleyball, badminton, table tennis, softball, tennis etc.

**Prerequisite:** Successful completion of *Wellness I and Wellness II*. Targeted Student Expectations (See Pg.4): 1, 2, 4

## **802 Fitness/Women’s Health** **PD** **½ Credit** **Grade 11, 12**

This course is designed to have an effect on your life by providing you with the knowledge and skills that will enable you to achieve and maintain optimal health. The focus will be on defining and toning your body, building strength, smart eating and self defense. We will identify some of the important issues affecting how we feel about ourselves, especially our body image. Targeted Student Expectations (See Pg.4): 1, 2, 4

**804 Early Childhood Education 1 PD 1 Credit Grade 9,10,11,12**

This introductory course in child study is useful in exploring adult roles in parenting and guiding caregivers to develop a more resilient child for today's society. Students will learn about caring for children in general, with an in-depth study of parenthood, pregnancy, prenatal care, and the physical, intellectual, emotional, and social development of infants. The student will also be able to identify the legal and health consequences of child abuse, domestic violence, sexual harassment, rape, and other forms of violence. Current issues in human sexuality will also be discussed. Films, videotapes, role playing, and field trips, along with the observation of young children enhance the early childhood program. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**808 Early Childhood Education 2 PD 1 Credit Grade 10, 11, 12**

This course takes a more in-depth look at the toddler from the age of two until the age of six. Emphasis will be on behavior patterns, developmental guidance and discipline, nutrition, multiculturalism, the care of children with special needs, child abuse, neglect, the high rate of teen pregnancy, and divorce. Students will study and provide a document of their own personal health history. The development of responsible health attitudes for themselves and their families will also be explored. Learning will be further enriched by aiding kindergarten teachers in their classroom. **Prerequisite:** *Successful completion of Early Childhood Education 1.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**807 Fundamentals of Independent Living PD 1 Credit Grade 11, 12**

Young people of today need to learn how to live in a society that is changing daily. They need to learn how to manage money, balance competing priorities and interests, and allocate time for study, work, and recreation. Topics for study will include issues surrounding buying or renting a house, investing and insuring a car, shopping and preparing nutritious food, credit smartness, and budgeting a paycheck. Students will also learn to analyze, develop, and act on informed opinions concerning our current economic, environmental, political, and social issues concerning our state, nation, and world. Career options, both academic and occupational, needed for employment and economic independence will be explored. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**813 Fashion Design and Style Technology PD ½ Credit Grade 10, 11, 12**

Students will learn how to measure, follow directions, and construct their own fashions with an eye to line, color and design. Attention is given to tailoring and special techniques for modern fabrics and couturier finishes. Project selection is determined by progress of individual skills. Consumer, vocational and vocational avenues are explored. **Prerequisite:** *"C" or better in Fashion and Design Technology.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**814 Fashion and Design Technology PD 1 Credit Grade 9,10,11,12**

This course is designed for those who enjoy creating fashion garments. Historic costume as well as modern designs will be studied to understand the significance of history of fashion and its relation to current trends. The element of color and the principles of line and design will be explored. Study will be made of fashion designers and their contribution to the industry. Careers in apparel design and production, fashion merchandising, and fashion promotion will be explored. Students will be able to express their abilities with the creation of their own designs. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**818 Nutrition 1 CP 1 Credit Grade 10, 11, 12**

This course is designed to introduce students to nutrition, consumer skills, and food preparation. Information is presented in a combination of in-class lectures, exercises, as well as laboratory work. Incorporated within each unit is the study of nutrition, simple food chemistry, food storage, food use, cooking terms, and the evaluation of recipes and food products. Throughout the course students will gain self-confidence in food preparation skills as well as strengthen their managerial skills. Targeted Student Expectations (See Pg.4): 1, 2, 4, and 5

Nutritional 1 Consumable Fee - \$50.00

**820 Dietary Science** **CP** **1 Credit** **Grade 10, 11, 12**

The first half of this course offers students opportunities to explore the many aspects of the food service industry. Hands-on experience will be provided in the food laboratory using advanced techniques that will help develop marketable working skills. The second half of this course introduces "Foreign Foods", studying various countries, their culture, traditions, and food habits. Managerial skills, cooperation and creativity are stressed.

**Prerequisite:** "B- or better in Nutrition I. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5  
Dietary Science Consumable Fee - \$50.00

**993 Wellness I** **PD** **1 Credit** **Grade 9**

Required for students in grade 9, this course presents developmentally appropriate material to address wellness content areas. A sample of health topic areas to be covered include: stress awareness and management, HIV awareness, decision making, nutrition, health risks of tobacco, alcohol and other substances.

The physical education component of this course provides students with an understanding of fitness as it relates to physical activity. Emphasis is placed on refining motor skills and developing leadership and decision making skills. Students will have the opportunity to be trained in CPR, participate in individual fitness testing programs, and learn the skills, strategies and rules necessary to participate in and enjoy a variety of leisure and physical activities in order to maintain lifelong health and well being. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**992 Wellness II** **PD** **1 Credit** **Grade 10**

Required for students in grade 10, this course presents developmentally appropriate material to address wellness content areas. A sample of health topic areas to be covered include: sexuality, accident prevention, interpersonal relationships, violence prevention, signs, symptoms and treatments of STD's.

The physical education component of this course provides students with an understanding of fitness as it relates to physical activity. Emphasis is placed on fitness activities with lifetime value. Students will have the opportunity to compare their results of fitness testing from the previous years and develop strategies to improve in any areas that are necessary. Students will also participate in a variety of leisure and physical activities in order to maintain lifelong health and wellbeing. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4

**996 Peer Education** **PD** **½ Credit** **Grade 11, 12**

This course provides an opportunity to learn to help other young people by developing communication skills, clarifying personal values, and examining contemporary teenage issues. Topics include self-esteem, peer pressure, depression, stress, coping skills, alcohol and drug use, sexuality, decision making, and health issues resulting from these decisions. Students will practice helping others by working with students at the elementary and middle school levels. **Prerequisite:** *Successful interview and teacher recommendation.* Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

**970 Sports Medicine/Athletic Training** **PD** **½ Credit** **Grade 11, 12**

The sports medicine program will combine course work with practical hands-on application to expose students to the field of athletic training. The sports medicine program is designed for students interested in careers such as: athletic training, physical therapy, medicine, fitness, physiology of exercise, kinesiology, nutrition and other health related fields.

The course focus is on: care, prevention, treatment and rehabilitation of sports related injuries. The lab component of the program will include: training in emergency care, first aid and CPR is an area of certification. An introduction to fitness, strength training programs and nutrition are topics which are explored. The culmination of learning and applying the previously mentioned skills will offer students a "real life" experience in the field of sports medicine. **Prerequisites** *Students should have a background in Anatomy and Physiology. The class will be limited to 15 students per section. All Sports Medicine students must devote time after school assisting in the Training Room and covering athletic events.* Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5

**972 Strength and Conditioning for the Serious Competitor PD 1 Credit Grade 11, 12**

This class is designed to teach both the male and female athlete the importance of preparation for spirit, mind and body during athletic competition. This course will cover a variety of topics including sports nutrition, muscular strength, flexibility, endurance and psychological wellness. The lessons demonstrated in this class will be beneficial for athletic competition and everyday life. All students are expected to participate both mentally and physically.

**Prerequisite:** Successful completion of Wellness I and Wellness II, as well as participation on an athletic team or by permission of the instructor. Targeted Student Expectations (See Pg.4): 1, 2, 3, 4, 5

**986 Introduction to Special Methods in Education CP ½ Credit Grade 11, 12**

This class of 11<sup>th</sup> and 12<sup>th</sup> grade students gives an overview of special educational methods and techniques. As a practical hands-on course, students will be working directly with Melrose Middle School students in a peer mentoring role. Areas addressed will include communication, educational tutoring and age appropriate social/leisure skills. Targeted Student Expectations (See Pg.4): 1, 2, 4, 5

---

---

## Community Learning

---

---

### Service Based Learning

The purpose of Service Based learning is to give interested students the opportunity to serve their school in meaningful work-related ways and receive school credit for their efforts. Each student will be placed in a department within the school. Examples of placements include science or computer departments (lab aide), Resource Center (library assistant), Channel 15 (television production assistant), cafeteria (food service), nurse's office (nursing responsibilities), custodial (responsibilities in maintaining a large facility), and administrative offices (general office duties). The student will have a job description with specific duties and a supervisor to report to daily. Emphasis will be on developing good work habits.

Another set of school service experiences includes certain leadership positions in specific student activities that require considerable daily attention and which contribute to school life in general. Examples of such roles include yearbook editors, student council leaders, and tutors in core subject areas such as science and math. Students seeking to be enrolled in School Service under this area of service must have the permission of the Principal and the activity advisor or department coordinator in addition to the School-to-Career Coordinator.

**983 School Service PD ½ Credit Grade 11, 12**

This option cannot be selected by the student; assignment to School Service is **by appointment only**. Students who are interested in School Service should speak with Mrs. Farrell or Mr. Savarino.

---

---

## Special Education

---

---

The Office of Parent/Pupil Services within the Melrose School Department provides for the special needs of Melrose High School students through identification, assessment and program development as required by both state and federal law. Parent Pupil Services staff members at Melrose High School provide students with a variety of supports and programming options designed to meet the unique needs of the students. Team meetings are held with parents, students and staff to review assessment information and student progress in their educational program. As part of this process the Team will discuss the most appropriate support for the student based upon his/her individual needs with the goal of assisting the student achieve success in their educational pursuits. Individualized Educational Programs (IEP's) specify programming that supports the student in the least restrictive environment. Some examples of programming include team teaching by a special educator and a general educator or small group instruction by a special education staff member.

---

---

## Notes

---

---

NOTICE TO ALL STUDENTS: An important piece of legislation affecting the public schools was passed August, 1971. This law, Chapter 622 of the General Laws of 1971, is intended to prohibit discrimination in the public schools and guarantees each student the right to equal educational opportunity, as amended in December of 1993.

"No child may be excluded from any school nor prohibited or discouraged from participating in any course, activity, or resource available in such schools on account of race, sex, color, national origin, religion, or sexual orientation."

In selecting a course of study, each student should be aware that all courses have been made fully open and available to members of both sexes and all minority groups.